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ABSTRACT

This proficiency guide was designed to serve as a resource for local school corporations in developing, reviewing, and revising curriculum documents. It was assembled in response to an Indiana State Board of Education directive to produce a guide to aid school systems in establishing proficiencies in English language arts, mathematics, social studies, science, fine arts, health education, physical education, foreign language, and practical arts/industrial technology education. The guide specifies what every Indiana student should have the opportunity to learn in these subjects from kindergarten through 12th grade. Section 1 describes how to use the guide, section 2 presents a curriculum development model, and section 3 outlines subject area proficiency statements. The concluding sections provide philosophy statements and proficiency lists for each subject area by specific grade level or by kindergarten/primary, upper elementary, middle/junior high, and high school designations. A general bibliography and bibliographies for each subject section are included. (JHP)

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INDIANA CURRICULUM PROFICIENCY GUIDE

Indiana Department of Education

Center for School Improvement
and Performance

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Indiana Department of Education

H. Dean Evans, Superintendent
Room 229, State House • Indianapolis, IN 46204-2798 • 317 232-6610

We have witnessed in recent years a renewed interest in how well our schools are serving students and society. There has also been a refocusing on the student's personal responsibility to study and learn. Measuring how well students are accepting these responsibilities, through demonstrated achievement, requires a recognition of the specific learning opportunities that schools should provide.

The Indiana Curriculum Proficiency Guide is designed to assist local school corporations in defining these specific learning opportunities. Based on the best research and the experiences of many Indiana educators and of recognized experts in the various subject areas, the guide provides a conceptual framework for developing a comprehensive K-12 curriculum at the local school level. The implementation of the guide is viewed as a shared endeavor involving all persons concerned with the education of Indiana's students. We encourage each school corporation to use the guide in the way that best fits the local situation.

This guide is a dynamic document, for curriculum development must be ongoing. We will continue to gain knowledge about curriculum, instruction, and the learning processes. The flexibility of this document will allow the incorporation of new ideas reflecting the latest research and the practical experiences of Indiana's educators.

H. Dean Evans
Superintendent of Public Instruction
June 1, 1987

INTRODUCTION

FOREWORD

Never before in the history of the state of Indiana has so much attention been focused on the quality of the education its young citizens receive. This attention demands careful consideration of what skills and knowledge students should be expected to acquire during their years in elementary and secondary schools. Indiana's school corporations have the responsibility to equip all students with the skills necessary for them to function successfully in a continually changing world. A clear statement of curriculum goals by the Indiana State Board of Education will provide guidance to curriculum development efforts at the local school corporation level. This will, in turn, give direction to what teachers and students are expected to accomplish in our classrooms.

The **Indiana Curriculum Proficiency Guide** was developed in response to a directive from the State Board of Education to produce a guide to aid schools in establishing proficiencies for each discipline: English language arts, mathematics, social studies, science, fine arts, health education, physical education, foreign language, and practical arts/industrial technology education. This document is designed to serve as a resource for local school corporations as they develop, review, and revise their own curriculum documents.

The proficiency guide is a dynamic document, designed to be easily changed to reflect the most recent and best current thought and research concerning students' learning needs. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

ACKNOWLEDGEMENTS

The **Indiana Curriculum Proficiency Guide** has been completed as a result of the work of many educators from around the state of Indiana. These professionals brought to this task their expertise, their creativity, and, most of all, their commitment. Each person is recognized by name in the various subject area guides, but a general acknowledgement of gratitude is warranted here.

In addition, special acknowledgement is due the following individuals for their outstanding efforts in making the guide a reality:

- The Indiana Department of Education consultants who coordinated and directed the work of the writing committees for each subject area, including

  Walter Bartz — Foreign Language
  Jim Biddle — Practical Arts/Industrial Technology Education
  Jerry Colglazier — Science
  Sheila Ewing — English Language Arts
  Mary Fortney — Social Studies
  Phyllis Lewis — Health Education and Physical Education
  Jeff Patchen — Fine Arts
  Rita Schilling — English Language Arts
  Martha Wilson-Hegg — Mathematics
  Joe Wright — Science

- Glenn Linnert, Director of the Indiana Curriculum Assistance Center, who helped to develop the framework for the proficiency document and who assisted in numerous other ways.
- And, finally, special thanks go to Phyllis Alexander, text editor; Daniel Hawkins, graphic artist; and Marla Wade, typesetter.

John A. Harrold
Special Assistant for Planning

Sally Mobley
Proficiencies Coordinator

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RATIONALE

"Would you tell me, please, which way I ought to go from here?" said Alice. "That depends a good deal on where you want to get to," said the Cat.

Alice in Wonderland
LEWIS CARROLL

If a major goal of education is to provide students with opportunities to develop the fundamental skills and processes essential for living as productive members of a global and rapidly changing society, then all involved in the education of children need to know where they wish to go and then formulate a plan for getting there. This is why good curriculum planning is so important.

William H. Schubert, in his book **Curriculum: Perspective, Paradigm, and Possibility**, indicates that there are three basic questions which are fundamental to any curriculum development effort:

- What knowledge is worthwhile?
- Why is it worthwhile?
- How is it acquired or created?

We would suggest that another question should also be considered:

- How can this knowledge be applied to daily life both in the present and the future?

What knowledge, what skills and processes, what attitudes do students need to acquire so that they may assume their responsibilities as citizens in a democratic society? A major purpose for the development of the **Indiana Curriculum Proficiency Guide** is to provide some direction in answering that question. The guide specifies **what** every student should have the opportunity to learn in kindergarten through the twelfth grade. It will thus serve as a benchmark for local curriculum development, setting a standard for the knowledge and skills that Indiana educators consider worthwhile. Another important purpose of the guide is to assist both the Indiana State Board of Education and the Indiana General Assembly in measuring the quality of the state's school programs and in making informed decisions about educational issues.

AUTHORITY

Indiana State Board of Education rules, promulgated in 1984, state:

> "Schools shall maintain instructional programs which provide all students with opportunities to acquire minimum proficiencies in each listed area (in courses in which they enroll). A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed by the state department of education." [511 IAC 6-2-2(b), 3(f), 4(g), and 5(c)]

CURRICULUM GOALS

As proficiency writing committees began to comply with the State Board's directive, a set of educational goal statements was developed and refined to act as an advanced organizer for structuring of the proficiencies. These curriculum goals describe, in general terms, what school programs should provide students in order to prepare them to function successfully in the twenty-first century. The goals, listed below, also reflect the contributions of all subject areas to a student's education.

Students in Indiana schools will be provided learning experiences which permit them to:

- *master skills necessary to gather and process information and to communicate information and ideas efficiently.*
- *acquire and use content as the vehicle for development of the creative and critical thinking necessary for making informed decisions and for continued learning.*
- *develop the attitudes, ethical principles, and artistic values necessary to live a responsible, productive, and physically satisfying, self-fulfilling life.*
- *gain the understanding of their own and other cultures needed for them to become involved global citizens.*
- *acquire the skills necessary to be successful in their chosen life roles.*
- *develop and use skills necessary to manage the changing conditions associated with social living.*

CURRICULUM GOALS

In February of 1986, the State Board of Education reinforced the emphasis of these curriculum goals in adopting six major goals for education in Indiana. Goal 6 speaks to the issue of school curriculum.

GOAL 6. Ensure That the Public School Is Responsive to the Needs of Students

The intent of this Goal is to provide the leadership and, where appropriate, standards and regulations which ensure that Indiana's children receive an education that will prepare them for a productive life in a pluralistic and changing global society. To achieve this Goal the Board will:

- Ensure continuity in the learning experience as children progress from one course to another, and one grade level to another, and ensure that learning objectives and expected competencies of each grade level are clearly articulated and understood by students, parents, and community.
- Integrate communication, critical thinking, decision making, problem solving, and study skills into the teaching and learning process.
- Ensure that subject matter taught in the public schools prepares children for a productive life in a pluralistic and changing global society.
- Provide sufficient flexibility to curriculum and teaching methods to ensure that all children, regardless of individual differences, have an equal opportunity to learn and are challenged to reach the highest level of achievement consistent with their ability.
- Provide students through the school curriculum, co-curricular and extra-curricular activities the opportunity to acquire the knowledge, skills, habits, and attributes that prepare them to become productive members of society.

Achievement of this Goal will be indicated when the curriculum of all public schools meets the stated objectives.

From **Major Goals for the State Board of Education**
Adopted February 6, 1986

DESCRIPTION OF THE INDIANA CURRICULUM PROFICIENCY GUIDE

Following this general information concerning the nature of the **Indiana Curriculum Proficiency Guide,** this notebook contains the following sections:

- Use of the Guide.
- Curriculum Development Model.
- Foundation Proficiency Statements.
- Case Studies (Fall 1987). These case studies will be developed by those corporations in the Indiana School Curriculum Improvement Program which conducted a review and in-depth study of the proficiencies during the 1986-87 school year.
- Bibliography.
- Proficiency Guide for Each Subject Area.

DEFINITION OF PROFICIENCY

The term **proficiency,** as it is used in the guides, describes the educational growth that learners are expected to achieve as they progress through school. The **proficiency statements** contained in the **Indiana Curriculum Proficiency Guide** provide a general framework of expected abilities which students should have opportunities to acquire. *The proficiency statements are not to be confused with minimum competencies; they are designed to signify the level of excellence that all students have the opportunity to attain.*

Each proficiency statement is specific to a given subject area and/or development level and is operationally defined as follows:

> An open-ended performance statement that gives direction to the types of learning opportunities a student should experience in a given subject and/or developmental level.

PROFICIENCY STATEMENTS/ INDICATORS

The proficiency statements are listed at three levels of specificity in each subject area. A description of each level follows.

• Foundation Proficiency Statements

The **Indiana Curriculum Proficiency Guide** is directly tied to the general curriculum goals previously listed through a set of **Foundation Proficiency Statements.** These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

• Specific Proficiency Statements

Specific Proficiency Statements are listed for each curriculum area. These statements identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling. In most subject areas, the **Specific Proficiency Statements** are identified by developmental levels, i.e., *1) kindergarten/primary, 2) upper elementary, 3) middle/junior high school, and 4) senior high school.* Local school corporations may wish to use the specific proficiency statements to develop desired learning outcomes for each grade level and/or course.

• Proficiency Indicators

The **proficiency indicators** provide examples of behaviors which indicate that a specific proficiency has been acquired. The lists provided for each specific proficiency statement suggest only **sample indicators;** they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

OBSERVATIONS CONCERNING THE PROFICIENCIES

The following observations regarding the proficiency statements may help clarify their function and purpose:

1. The state proficiencies are not to be construed as teaching guides. While the proficiencies are to give direction to local planning, it is not the intention of the Indiana State Board of Education to direct local curriculum by listing the specific performance objectives for day-to-day teaching. That remains the task of local school districts.
2. For local planning, the proficiencies are intended to assist in identifying the kinds of skills and knowledge that students should have opportunities to acquire. The proficiencies will also provide direction to curriculum workers at the local level as they develop their corporations' instructional objectives, supporting instructional activities, and methods of assessing individual student progress.
3. The state proficiencies are not to be confused with minimum competencies. Minimum competencies identify skills and knowledge which every student should master. Proficiencies go a step further by identifying a more comprehensive range of learning opportunities schools should provide. They are stated in performance terms in order to focus on the learning outcomes that should result from these opportunities.
4. The guide will be used to assist the Indiana State Board of Education and the Department of Education in such efforts as designing school accreditation guidelines, evaluating teacher certification requirements, guiding the statewide textbook adoption process, and planning of statewide evaluations and assessments.

DEVELOPMENT OF THE GUIDE

The development of the **Indiana Curriculum Proficiency Guide** has been viewed as a *continuous* process proceeding through *several* phases of study and research, preparation, review, use, and revision. The process of developing the guides began with the formation of ad hoc writing committees in each curriculum area working under the leadership of Indiana Department of Education curriculum consultants. Subject area specialists and practitioners at all levels of education (primary, upper elementary, middle/junior high school, senior high school, and college and university) from around the state made up the membership of these committees. After much study and research and the drafting of a philosophy statement, each writing committee developed the Foundation Proficiency Statements for its particular curriculum area. Specific Proficiency Statements were then written for the developmental levels within the subject area. Finally, Proficiency Indicators were listed to give users of the guide **examples** of measures by which student acquisition of a specific proficiency might be judged. At each stage of writing, the drafted proficiencies were reviewed and revised as needed. This process will continue as the local school corporations begin to use the proficiencies.

REVIEWS OF THE GUIDE

To ensure that the **Indiana Curriculum Proficiency Guide** has content validity and to evaluate its effectiveness as a framework for local curriculum development, several types of review were undertaken.

- Practitioner networks were set up by Department of Education curriculum consultants to give local educators (practitioners) the opportunity to review the subject area guides and to make recommendations. The drafts were also provided to the leadership of professional organizations related to the various disciplines for their review.
- Subject area advisory committees were formed with one of their tasks being to review and react to their respective subject area guides and to make suggestions for their improvement.
- The Model Sites and Network Affiliates of the Indiana School Curriculum Improvement Program were asked to conduct a review of the proficiencies. In addition, eight of these school corporations used the subject area guides as they worked on local curriculum documents. The efforts of these sites will be chronicled in case studies.
- Drafts of the guides for science, health education, and physical education were used both at the state level and at the local school corporation level in the process of evaluating and adopting textbooks.
- Drafts of the subject area guides were sent for review to any person or organization requesting them. Responses from all reviewers were encouraged.
- The Committee on Learning and the Committee on Standards functioning under the Indiana Curriculum Advisory Council were asked to review the proficiencies. These committees will continue to address such issues as a core curriculum and how children learn.
- A National Panel of Experts for each subject area and for general curriculum development was assembled to review the proficiencies. Those contacted to serve on the panels are considered to be national experts in their particular fields.

The most important review of the guide will come, of course, when the local school corporations begin to use it as they develop, review, and revise their own curriculum documents. The evolving nature of the guide will allow changes to be made when necessary.

USE OF THE GUIDE

USE OF THE GUIDE

Local School Corporation

The Indiana State Board of Education, in its directive to the State Department of Education, stated that a "guide" to aid local schools in establishing proficiencies be prepared. The **Indiana Curriculum Proficiency Guide** serves that purpose. It should be noted that the proficiencies listed for each subject area specify the knowledge, skills, processes, and attitudes that members of the proficiency writing committees and the many persons who reviewed them determined to be most worthwhile. The proficiency statements are forward-looking, reflecting the latest research and current thought in each of the curriculum areas and emphasizing the development of higher-order thinking and reasoning skills. They provide a standard for local curriculum development.

Included among the areas in which the proficiency statements will provide guidance to the school corporations are:

- Planning of needs assessment activities
- Developing and reviewing/revising local curriculum documents
- Selecting instructional materials/textbooks
- Designing evaluation or testing programs
- Communicating with parents and the local community
- Planning new instructional techniques
- Identifying priority in-service programs

Indiana State Board of Education/Department of Education

The guide will also assist the Indiana State Board of Education and the Department of Education in their efforts to provide leadership and assistance to the local corporations in the following processes:

- Designing school accreditation guidelines
- Evaluating teacher certification requirements
- Guiding the statewide textbook adoption process
- Planning of statewide school improvement ventures
- Planning of statewide evaluations and assessments
- Identifying goals for teacher in-service or retraining programs

Institutions of Higher Education

Institutions of higher education will find the guide useful in projecting the capabilities of students matriculating from Indiana schools and in designing initial coursework for these students. The guide may also be used for:

- Evaluating teacher preparation programs
- Identifying educational needs of teachers and school administrators
- Designing coursework to meet those needs
- Designing leadership programs
- Assisting the Indiana Department of Education and local school corporations

USING THE GUIDE

It is recognized that the **Indiana Curriculum Proficiency Guide** will be used in different ways by the local corporations. Those school corporations already involved in curriculum development efforts will use the guide to check the "fit" of their learning goals with the state proficiencies and make adjustments where needed. Other corporations will use the guide as a foundation document to begin the development of local curriculum documents. In this case, curriculum planners could study the proficiency statements listed for each developmental level in a given subject area, e.g., upper elementary mathematics. They might wish to use the specific proficiency statements to develop learning objectives for each grade level or course. They would then need to consider the following:

a) what activities they would use to help students attain the stated objective or proficiency;
b) what they would expect students to be able to do as a result of the teaching and learning activities, i.e., the indicators that demonstrate proficiency has been reached.

Curriculum planning at the local level involves more than simply matching the state proficiencies to local learning objectives. The process of curriculum development is cyclical and includes several components, e.g., establishing a rationale, assessing needs, etc. A Curriculum Development Model to help corporations in this process is offered in the next section. There are, of course, many models for curriculum development, and local school personnel should select or develop one that will be most helpful to them.

Curriculum planning teams may wish to consider the following steps as they begin to use the **Indiana Curriculum Proficiency Guide:**

A. Become Familiar with the Rationale for and the Organization of the Guide

Most school personnel will find much more is familiar than unfamiliar in the proficiencies for each subject area. A major reason for this is that many Indiana teachers and curriculum specialists served on the writing teams and many more reviewed the various drafts produced by those teams.

An important first step in using the guide is to become familiar with its purpose and organization. The introductory sections provide a rationale for and a general description of the guide and offer some suggestions for developing curriculum at the local level.

B . Become Familiar with the Content of the Guide

Following the general sections of the **Indiana Curriculum Proficiency Guide** (Introduction, Use of the Guide, Curriculum Development Model, Foundation Proficiency Statements, Case Studies, Bibliography), are separate guides containing the proficiency statements for each subject area. As local teams begin to develop or review/revise curriculum documents, they will need to study the proficiencies for that area. Introductory material in each subject-area guide provides an explanation of the underlying philosophy which gave direction to the development of the proficiency statements. Suggestions for using the proficiencies, specific to each subject area, are also offered.

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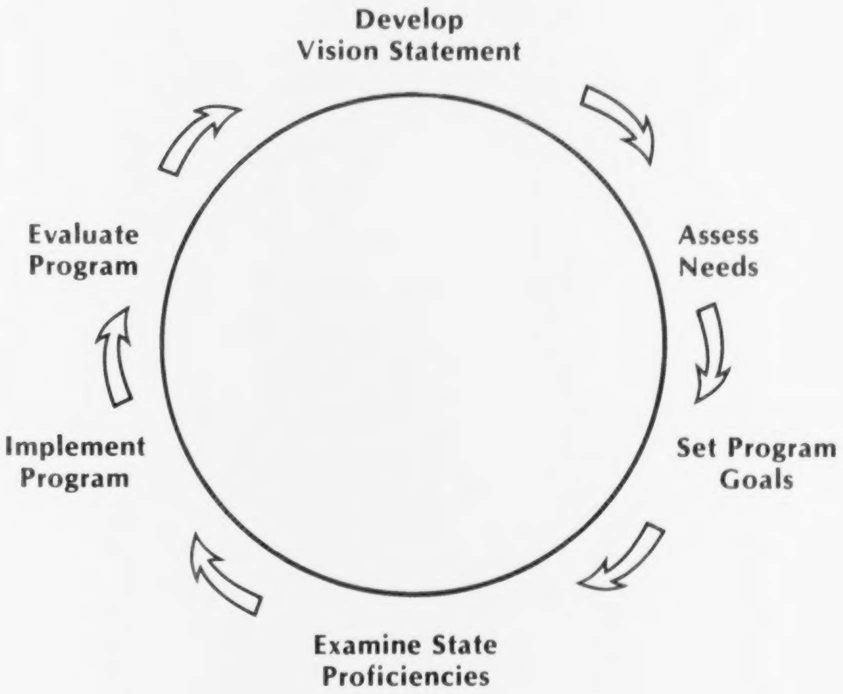
CURRICULUM DEVELOPMENT MODEL

CURRICULUM DEVELOPMENT MODEL

The continuous process of studying, reviewing, developing and updating curriculum helps to assure that the general goals of education are being served. One possible model for providing an ongoing curriculum development process is outlined below, with suggested steps and issues to be considered.


Develop Vision Statement
Assess Needs
Set Program Goals
Examine State Proficiencies
Implement Program
Evaluate Program

(Steps are outlined on the back of this page)

DEVELOP VISION STATEMENT

A vision provides a foundation for the development of a curriculum plan to meet the needs of students. This foundation should be developed with input from as many as possible of those who will use it. Changes in the vision should cause changes in the curriculum; any changes in curriculum should be within the parameters of the vision statement.

ASSESS NEEDS

Assessing needs and strengths may be accomplished through both formal and informal measures. Informal assessments are one source of data which may be reported in minutes of meetings, reports of committees, classroom discussions, etc. Some more formal measures may result from surveys, test scores, and student evaluations such as grades.

EXAMINE STATE PROFICIENCIES

The **Indiana Curriculum Proficiency Guide** presents a standard for curriculum development which is based on research and current knowledge of the teaching and learning processes. By offering direction and support for local planning efforts, the proficiencies will provide a resource and a checkpoint for development of goals and objectives for a local program.

SET PROGRAM OBJECTIVES

After careful review of the assessed needs and the identified standards, the program objectives may be established. The stated objectives should reinforce the strengths identified by the needs assessment and develop a force for the change in direction which is indicated by a comparison with standards. The recommendations regarding teaching methods, materials, and evaluation should be consistent with the objectives of the program.

IMPLEMENT PROGRAM

Implementation of the stated curriculum should be accompanied with in-service programs for teachers who will be involved in the delivery. There should be opportunity for input from teachers regarding time lines, methods, materials, and evaluation procedures. The process of implementation should be initiated with plans for monitoring and modifying the program whenever necessary, according to the recommendations from participants.

EVALUATE PROGRAM

Evaluation should provide opportunities for formative evaluation, informal measures and assessments of the working processes of the program and student achievement. Another part of the plan should be a summative evaluation, a more formal, statistical presentation of the strengths and weaknesses of the program.

The process should be continuous and should involve teachers who will be expected to use the developed curriculum. There must be a slow but deliberate process of locally based curriculum development, designed to strengthen teacher commitment to implementing change. The result of this professional effort will be a curriculum and instructional program that combines the best research, instructional design, and evaluation available at any moment in time. This effort will be directed to assisting all students to achieve their potential as citizens of the twenty-first century.

Other models for curriculum development can be found in the references listed in the bibliography included in another section of this guide.

FOUNDATION PROFICIENCY STATEMENTS

FOUNDATION PROFICIENCY STATEMENTS

To more clearly define the focus of each curriculum area and to show the unique contributions of each to the general curriculum goals of the state, foundation proficiency statements are listed for each subject area. These statements set forth, in general terms, the learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling. They provide direction for the development of the specific proficiency statements and indicators.

The foundation proficiency statements for each curriculum area are listed on the following pages.

FOUNDATION PROFICIENCY STATEMENTS

ENGLISH LANGUAGE ARTS

Students in Indiana schools will be provided learning experiences in the **English language arts** which allow them to:

1. develop reading processes for the purposes of comprehending, enjoying, and using printed materials.
2. understand and experience the ways in which literature enriches life.
3. appreciate and understand the English language and its relationship to culture and human experience.
4. acquire speaking skills for the purposes of communicating ideas and experiences in both formal and informal situations.
5. develop aesthetic and critical listening skills for the purposes of understanding, appreciating, and responding to oral language.
6. use writing for the purposes of discovering and expressing feelings and ideas while acquiring the technical skills necessary for effective written communication.

FOUNDATION PROFICIENCY STATEMENTS

MATHEMATICS

Students in Indiana schools will be provided learning experiences in **mathematics** which allow them to:

1. develop a positive attitude toward mathematics and appreciate the role of mathematics as a factor in personal growth, as a method for making predictions about societal trends, and as a model for abstract reasoning.
2. develop a conceptual framework of mathematical ideas expressed as numbers, words, symbols, and figures.
3. acquire skills necessary to perform routine manipulations and standard algorithmic procedures.
4. acquire skills in visualizing and interpreting mathematical relationships and communicating these ideas.
5. acquire skills in selecting and applying relevant data to solve routine and nonroutine problems.
6. acquire skills necessary to utilize technology as a part of the mathematical process.

FOUNDATION PROFICIENCY STATEMENTS

SCIENCE

Students in Indiana schools will be provided **science** learning experiences which allow them to:

1. use data gathering and organization skills to identify and investigate questions and assumptions.
2. apply communication skills to exchange self-generated and acquired knowledge.
3. use the major ideas of science in rational, creative thinking.
4. appreciate the tentative nature of empirical knowledge.
5. appraise technological applications of scientific discoveries in terms of their ethical effects.
6. demonstrate competence and confidence in applying the knowledge, processes, and attitudes of science in making informed decisions.

FOUNDATION PROFICIENCY STATEMENTS

SOCIAL STUDIES

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. *gain knowledge;*
B. *process information;*
C. *consider the importance of values and beliefs;*
D. *actively participate in a democratic society.*

To achieve the goal of citizenship education, students in Indiana schools will be provided learning experiences in **social studies** which allow them to:

1. assess how the people, events, and decisions of the past influence the present and future.
2. describe the geographical patterns and interrelationships of the major physical and cultural features on the earth's surface.
3. analyze past and present political and legal structures in order to make rational choices as participating citizens in a democratic society.
4. analyze the interaction of people and institutions in economic systems.
5. investigate a range of world nations and cultures in terms of their diversity, commonalities, and interrelationships.
6. examine the patterns and interactions of individual and group behavior.
7. analyze current issues and hypothesize about their impact upon the present and the future.
8. draw conclusions or make decisions based on relevant data derived from a variety of sources.
9. develop a reasoned commitment to those civic values needed to function responsibly in a democratic society.

FOUNDATION PROFICIENCY STATEMENTS

FINE ARTS

Students in Indiana schools will be provided comprehensive arts learning experiences in **music, visual art, dance,** and **theatre** which allow them to:

1. express themselves through the arts by organizing, creating, and performing.
2. perceive, identify, describe, and analyze the distinguishing characteristics of form, structure, and style in the arts within a variety of cultural and historical contexts.
3. know the role the arts have played and continue to play in the life of man.
4. evaluate works of art based upon critical perception and analysis.
5. establish a lifelong commitment to the arts, value their importance in the life of the community, and develop the ability to continue arts education independently.

FOUNDATION PROFICIENCY STATEMENTS

FOREIGN LANGUAGES

Students in Indiana schools will be provided learning experiences in **foreign languages** which allow them to:

1. acquire the skills needed to communicate in languages other than their native one.
2. acquire an understanding and appreciation of others and of themselves by comparing their own culture with the cultures, social behaviors, and values of people from various areas of the world.
3. acquire knowledge about the politics, history, geography, literature, and the arts of other societies in the world.

FOUNDATION PROFICIENCY STATEMENTS

HEALTH EDUCATION

Students in Indiana schools will be provided learning experiences in **health education** which allow them to:

1. use data gathering and organization skills to identify and investigate questions and assumptions about health.
2. apply communication skills to acquire and exchange knowledge about health.
3. use the major concepts and knowledge in health science in critical thinking.
4. evaluate applications of scientific discoveries in health in terms of their overall effects.
5. demonstrate competence and confidence in utilizing health knowledge, processes, and attitudes in making informed decisions.
6. recognize the concept that health is a right and responsibility of every individual and community.
7. internalize the concept that health is multidimensional — mental, physical, social, emotional, and spiritual — and has an impact on the quality of life.

FOUNDATION PROFICIENCY STATEMENTS

PHYSICAL EDUCATION

Students in Indiana schools will be provided learning experiences in **physical education** which allow them to

1. demonstrate progressive movement competence in skills necessary for the development of complex movement patterns leading to participation in and appreciation of sport and rhythmic activities.
2. demonstrate the effects and benefits of fitness activities on the development of the structure and function of the human body which will contribute to lifetime physical fitness and wellness.
3. demonstrate cognitive learning through physical education as measured by written tests, projects, and/or documented teacher observations.
4. develop attitudes that lead to positive self-concepts, cooperative interaction, and lifetime sport and fitness skills.

CASE STUDIES

CASE STUDIES

The Indiana School Curriculum Improvement Program Model Sites and Network Affiliates that were involved in reviewing and piloting the **Indiana Curriculum Proficiency Guide** will prepare case studies chronicling their efforts at the close of the 1986-87 school year. These case studies will be printed and forwarded to each local school corporation for inclusion in the guide.

BIBLIOGRAPHY

BIBLIOGRAPHY

The following bibliography provides a list of resources that school personnel working with curriculum development might find helpful to review.

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Additional resources may be listed here.

ENGLISH LANGUAGE ARTS

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INTRODUCTION

The English Language Arts Proficiency Guide presents a conceptual framework for a K-12 language arts program, including its major components, which are reading/literature, oral communications, writing, and the study of language.

An Ad Hoc Committee of language arts educators from the state of Indiana collaborated in the development of this Guide. As their work progressed, they kept three principles uppermost in mind about the Guide. It should:

1. reflect current research about language arts content and instruction;
2. be usable in language arts curriculum development and revision efforts at the local level;
3. allow for interpretation and adaptation by the local school corporation.

In preparing the Guide, the Ad Hoc Committee reviewed the educational reports of the early 1980's which call for radical reforms in school curriculum. The committee discussed changes in educational theory, research, and practice as these relate to language arts education. For example, the committee studied process-oriented approaches to the teaching of writing.

This Language Arts Guide is based on research which stresses the highly active nature of language and emphasizes the connections within and among the various language skills and processes. Current research indicates that students who develop language skills in an integrated manner make progress more effectively both in learning all language skills and in learning other content area knowledge.

The Guide attempts to avoid two artificial separations often found in English language arts curriculum guides: (1) language arts and reading; and (2) literature and reading. Regarding the first fragmentation -- language arts and reading -- reading is clearly one of the language arts; the teaching of reading is integral to the teaching of the language arts. In regard to the second fragmentation -- literature and reading -- this Proficiency Guide stresses comprehension of various types of texts and the enjoyment of literature at every grade level.

The Guide emphasizes language in all its forms -- listening, speaking, reading, writing -- as means of communication and as learning tools. The placement of the various uses of language in this Guide does not indicate that one use is more important than or has precedence over another. Also, although the specific proficiencies are numbered, this numbering is for ease and convenience in using this Guide. The numbers are not intended to imply a certain sequence or an assignment of priorities.

This Language Arts Guide is meant to be a GUIDE, not a state-mandated curriculum. The members of the Ad Hoc Committee strongly recommend its use in local curriculum development and revision efforts because of its forward-looking stance and its foundation on current research in the area of language arts. The committee also recommends that the following be implemented in order to create conditions conducive to language learning and language teaching:

- Language Arts instruction should emphasize meaningful language use, rather than isolated skills or discrete bits of information about language. Time should be allotted for extended periods of independent reading and writing.

- Class size and teacher workload should be limited, especially in classes which have writing as a major emphasis. The National Council of Teachers of English has long recommended that writing class size be limited to twenty-five students and writing teacher workload be limited to one hundred students.

- Educational materials, supplies, and support staff should be available to language arts teachers. These include paperback books in the classroom; school library media centers with a variety of up-to-date, appropriate materials; and word processors for writing.

- English Language Arts teachers should be provided with time and opportunities for continual development. They should be encouraged to become involved in professional organizations and to read professional literature, and they should be given released time to attend conferences and participate in in-service training programs, such as the Indiana Writing Project.

- Evaluations of language arts programs and of individual students should rely on more than the use of standardized tests since these can assess only a part of the language arts program, e.g., reading skills, understanding of literature, grammar and language facts, editing and study skills. Additional means of formal and informal evaluation must be developed to assess the other components of the program, e.g., appreciation of literature, listening for meaning, composing process in writing, speaking effectively, development of attitudes, values, and interests. These other assessments could include teacher observations and judgment, teacher-made tests, games and contests, writing folders or portfolios, etc.

COMPONENTS OF THE GUIDE

This Language Arts Guide puts into effect the State Board of Education's directive: "A guide to aid schools in establishing proficiencies for each (subject) area shall be prepared and distributed to the schools by the State Department of Education." (511 IAC 6-2-2, 3, 4, &5)

The Guide is subdivided into the following components:

- Philosophy of English Language Arts
- Foundation Proficiencies of English Language Arts
- Specific Proficiency Statements by Developmental Levels
- Sample Indicators
- Bibliography

Philosophy of English Language Arts

The first section presents widely-held beliefs about English language arts and about each of its major components -- reading/literature, study of language, oral communications, and writing. These philosophical statements, rooted in contemporary research, emphasize the interrelatedness of all language abilities.

Foundation Proficiencies of English Language Arts

The six foundation proficiencies, or outcomes of instruction in English language arts, state, in broad general terms, those learning experiences which Indiana schools should provide to students. The foundation statements, applicable from kindergarten through grade twelve, imply an active and purposeful use of the English language by all learners.

Specific Proficiency Statements by Developmental Levels

This section of the Guide is subdivided according to students' developmental levels. Each of these sections lists specific proficiencies in the areas of (1) reading/literature; (2) study of language; (3) oral communications, and (4) writing. Four grade-level clusters or sections are used in this guide:

- kindergarten/primary (grades K-3);
- upper elementary (grades 4-6);
- middle/junior high school (grades 7-9);
- senior high school (grades 10-12).

The K-3 designation, for example, means that between kindergarten and grade three, students should have opportunities to acquire skills, knowledge, processes, and attitudes which are appropriate to their developmental level. Because of the diverse backgrounds, interests, and aspirations of learners, it is important for Indiana school curriculum planners to adapt this Guide as they develop language arts curriculum specific to students' needs.

Sample Indicators

Sample indicators are provided for each specific proficiency. These indicators are examples of behavior which give evidence that students have acquired the stated proficiency. The sample indicators are suggestions; they are not meant to be all-inclusive. Local school corporations may choose to modify and/or supplement these sample indicators.

A specific proficiency statement is frequently applicable from kindergarten through grade twelve and hence repeated from one developmental level to the next. However, the sample indicators which accompany such a repeated proficiency statement may change from level to level.

A sample is provided to illustrate the changes in sample indicators according to developmental levels.

PROFICIENCY	DEVELOPMENTAL LEVEL	SAMPLE INDICATORS
Students should - "develop curiosity and a lifelong interest in a range of reading materials..."	kindergarten/primary	"enjoy listening to storytelling"
"	upper elementary	"interact with poetry"
"	middle/junior high	"use leisure time to read, view, or listen to a variety of literary works"
"	high school	"interact with famous speeches, drama"

A local curriculum planning team may wish to specify indicators or learner outcomes for each grade or course. For example, a list of indicators could be developed for the first grade which would demonstrate the attainment of the specific proficiency ... "students should develop curiosity and a lifelong interest in a range of reading materials..."

COMPONENTS OF THE GUIDE (cont.)

Locally-developed learner outcomes for first grade students might include the following:

- select and enjoy library books
- enjoy literature in a variety of formats, e.g., puppet show, videotape, disc or tape recording
- write letter to favorite author
- enjoy cooking related to literary works
- retell literary work through activities in the fine arts

Bibliography

The Bibliography includes publications which the Ad Hoc Committee used to review up-to-date research and current practices in the area of Language Arts. Many of these publications proved helpful in the development of the various components of this Guide.

ACKNOWLEDGEMENTS

The Language Arts Proficiency Guide is the result of the work of several committees and many individuals, all of whom cannot be mentioned individually here. A core group of educators, however, deserves special mention and special thanks. These are the members of the Ad Hoc Writing Committee who generously contributed their ideas, support, and time in the development of this guide.

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STATEMENT OF PHILOSOPHY -- ENGLISH LANGUAGE ARTS

The English Language Arts Proficiency Guide is based on the belief that students should be surrounded by, immersed in, countless opportunities to learn language, learn about language, and learn through language. It is also based on the belief expressed so well by Ernest Boyer: "Language is not just another subject; it is the means by which all other subjects are pursued. . . . [it is] the core" (p. 20).

Since language use is developmental and never perfected, teachers and students together create a learning community where language is the main vehicle for learning in all the disciplines. In this social context, learners use language in a functional way: they listen, speak, write, read, question, use drama and explore literature, take risks, create, think, and make decisions. They participate in these experiences in order to accomplish individual or group goals and to learn about themselves and the world. In the process, they acquire the language skills successful speakers, writers, and readers use. The learning community we seek to establish is predicated on well-planned classroom environments where teachers demonstrate learning and engage students to discover and express themselves, to communicate with others, and to develop language - their human potential - in an atmosphere of mutuality and civility. Members of the learning community view language as a powerful tool for learning and thinking, and they act upon that belief.

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READING/LITERATURE: A Lifelong Pursuit

The ultimate goal of implementing the reading/literature proficiencies is to produce individuals who read widely, read well, and make reading a lifelong pursuit. Attaining such a worthwhile goal presupposes that reading begins with a person's earliest exposure to text and written language and continues to levels of literacy far beyond basic competencies.

According to the National Institute of Education publication, Becoming a Nation of Readers, "Reading must be seen as part of a child's general language development and not as a discrete skill isolated from listening, speaking, and writing. As proficiency develops, reading should be thought of . . . as integral to learning literature, social studies, mathematics, science, and other subject areas." The teaching of any subject area and the student's ability to read the language of that content are fused.

Reading is a complex process. Mastering parts of the process must not become an end in itself, but a means to an end. A proper balance between teaching specific skills and practicing the whole act of reading must exist.

Reading a wide variety of literature will enable students of all ages to discover a great deal about themselves and the human condition. According to the National Council of Teachers of English statement, "Essentials of English," "The reading and study of literature add a specific dimension to students' lives by broadening their insight, allowing them to experience vicariously places, people, and events otherwise unavailable to them, and adding delight and wonder to their daily lives."

Since individual student and class needs are varied, no lists of selected and/or required reading are proposed here. Also, no attempt is made to include all possible proficiency indicator statements for reading/literature because that number is possibly limitless. Rather, the goals of the reading/literature statements are that students 1) develop strategies which make them responsible users and critical interpreters of literature, 2) find personal satisfaction in interacting with literature and enjoy its sights and sounds, and 3) develop personal and social values as they reflect upon the material they read.

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LANGUAGE: The Single Most Important Means to Develop Informed, Thinking Citizens

Becoming a literate, articulate adult includes knowing about the English language itself. Students need to know and appreciate what words and sentences are and how they function in longer discourse. The proficiencies in this section touch upon a variety of aspects of general language study, e.g., adapting language to audience, purpose, and situation as well as learning the structure and function of the English language. In some respects, the language proficiencies overlap with proficiencies in other areas.

The rationale for the inclusion of these language proficiencies is that knowledge about the English language itself will enhance a student's use of the language. The National Council of Teachers of English statement, "Essentials of English," asserts: "attention to language makes students aware of how language functions and helps them control and use it in increasingly effective ways. Skillful use of language may be the single most important means of realizing the overarching goal of education to develop informed, thinking citizens."

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ORAL COMMUNICATION: Fundamental to Success

Although national reports on education have stressed the importance of the development of oral communication skills in school, proficiency in oral communication - **speaking** and **listening** - is often taken for granted. Most children enter school with a basic ability to communicate orally; however, they need deliberate instruction in both speaking and listening to become effective language producers and consumers. "Proficiency in oral communication," according to the Speech Communication Association, "is fundamental to success in academic learning, in participating in the life of the community, and in realizing satisfying relationships at home."

Direct instruction in speaking and listening should provide opportunities for students to develop a repertoire of active oral communication skills and to attain confidence and flexibility in speaking/listening situations. These opportunities should not be isolated, nor should they be confined to the English language arts classroom. Speaking and listening should be integrated into instruction across the curriculum and used to enhance learning in all content areas. However, rather than considering oral language as "merely a vehicle for assessing what students know," it should be considered "a fundamental tool which allows students to discover and consolidate new knowledge. In short, speaking and listening in school settings permit intellectual activity" (Wood, p. 11).

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WRITING: A Powerful Instrument of Thought

The National Council of Teachers of English calls writing "a powerful instrument of thought" through which "writers learn about themselves and their world and communicate their insights to others." People write to discover what they know, to create order out of chaos, to release feelings, to communicate ideas to others, to free their imaginations, to inform others, and to persuade readers to accept a point of view or buy a product. Thus, writing is a process of idea development, and the product must be viewed only as the result of that process. The focus of instruction, therefore, should be on the process rather than solely on the finished product. Teaching prewriting, writing, and revision as recursive processes is as important as evaluating final products.

Though every piece of writing does not necessarily become a "final product," those that do should reflect a style, as well as a level of mechanics and usage, that is appropriate for the intended audience. Formal grammar and mechanics, therefore, should be taught in conjunction with the writing process, using the student's own writing. If writing is done without regard for mechanics or if mechanics is separated from the writing process, the process and product are incomplete.

Studies on the teaching of writing indicate that many instructional practices, such as isolated grammar drill, do not produce good writers. What does seem to produce good writers is frequent writing for a variety of purposes and audiences as part of a systematic program in which writing is presented, discussed, and responded to by teachers and by students. This program should include writing as a way of thinking and learning in all content areas and at all levels of instruction.

Selected References

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ENGLISH LANGUAGE ARTS

PROFICIENCY STATEMENTS

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **English language arts** proficiencies:

Foundation Proficiency Statements	020000
Specific Proficiency Statements	
Kindergarten/Primary	021000
Reading/Literature	021100
Language	021200
Oral Communications	021300
Writing	021400
Upper Elementary	022000
Reading/Literature	022100
Language	022200
Oral Communications	022300
Writing	022400
Middle/Junior High School	023000
Reading/Literature	023100
Language	023200
Oral Communications	023300
Writing	023400

CODING SYSTEM (cont.)

Senior High School	024000
Reading/Literature	024100
Language	024200
Oral Communications	024300
Writing	024400

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS -- ENGLISH LANGUAGE ARTS

List 020000

Students in Indiana schools will be provided learning experiences in the **English language arts** which will allow them to:

1. develop reading processes for the purposes of comprehending, enjoying, and using printed materials.

2. understand and experience the ways in which literature enriches life.

3. appreciate and understand the English language and its relationship to culture and human experience.

4. acquire speaking skills for the purposes of communicating ideas and experiences in both formal and informal situations.

5. develop aesthetic and critical listening skills for the purposes of understanding, appreciating, and responding to oral language.

6. use writing for the purposes of discovering and expressing feelings and ideas while acquiring the technical skills necessary for effective written communication.

ENGLISH LANGUAGE ARTS
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 021000

READING/LITERATURE (021100)

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **reading/literature** at kindergarten through grade three, students should	Students will
1. **develop curiosity and a lifelong interest in a range of reading materials representing a variety of cultures, times, literary forms, and subject areas.**	a. use leisure time for reading, viewing, and listening to a variety of literature. b. listen with interest to storytelling. c. interact with a variety of printed materials, e.g., picture books, nursery rhymes, stories, poetry, textbooks. d. read regularly for uninterrupted periods of time. e. begin to develop a habit of reading that will carry over into adult life.
2. **develop independent reading strategies and adapt them to the particular contexts, purposes for reading, choices of materials, and stance toward the materials.**	a. use word recognition skills as a means to comprehension. - recognize that printed symbols (letters and words) represent the sounds of spoken language. - develop auditory and visual discrimination. - use phonetic analysis, structural analysis, and basic sight words to identify words and/or to construct meaning. - develop and expand word meaning through context clues, synonyms, and antonyms. b. comprehend the material they read. - understand and bring meaning to the words, phrases, and sentences they encounter in their reading. - understand and bring meaning to reading by recognizing and recalling details, main ideas, sequence, and character traits, and by making comparisons. - draw inferences from reading by interpreting, predicting, and drawing conclusions.

Specific Proficiency Statements	**Sample Indicators**
	c. use reading skills in the gathering, retaining, and analyzing of information. - alter methods of reading in relation to the type of materials they are reading and the purpose for reading. - use study skills to gather and organize the material they have read, e.g., categorizing and alphabetizing. - apply reading strategies in the content areas, e.g., locating and using parts of textbooks, using the context of passages to determine the meaning of new words.
	d. apply the reading skills they acquire in school to situations they encounter in everyday life. - read and comprehend labels, signs, and symbols. - locate information on maps, charts, and in catalogs. - read and make use of print media, e.g., newspapers and magazines.
3. think critically and reflectively through materials they read and materials that are read to them.	a. form critical judgments. - differentiate fact from opinion. - distinguish reality from fantasy. - recognize cause and effect relationships.
	b. see relationships between what they read and what they have previously read, learned, and experienced. - recall similar incidents from books, media, or personal experience.
4. respond actively and imaginatively to the literature they encounter.	a. describe characters and scenes from stories they have read. b. respond to literature in a variety of ways, e.g., drawing, puppet show, music, creative dramatics.

Specific Proficiency Statements	**Sample Indicators**
5. develop strategies for making independent critical evaluations of literary works.	a. explain why they enjoy reading and listening to some works and not others. b. recognize different literary forms, e.g. stories, poems, and plays, and explain how they are different. c. identify differences between fiction and non-fiction. d. understand and use basic literary terminology, e.g., character, rhyme, setting.

LANGUAGE (021200)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **language** at kindergarten through grade three, students should	Students will
6. view language as a powerful tool for learning and thinking and as a source of pleasure.	a. use language to express, analyze, and enlarge upon thoughts and ideas. b. choose to listen to, manipulate, and analyze words. - enjoy the sounds and rhythms of words. - play word games. - appreciate the images and humor created by words.
7. recognize varieties of language use and adjust use to audience, purpose, and situation.	a. recognize how language is used to influence thoughts, attitudes, and behavior. - identify situations in stories they have read, heard, or viewed which depict a person being influenced by the language of someone else. - examine their attitudes toward real or fictional characters to determine how their perceptions have been affected by the language these characters use. -identify ways in which the mass media use language to influence, e.g., advertisements.

Specific Proficiency Statements	**Sample Indicators**
	b. identify places where different types of language are spoken, e.g., home, school, television, playground.

ORAL COMMUNICATIONS (021300)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **oral communications**, i.e., **speaking** and **listening**, at kindergarten through grade three, students should	Students will
8. adapt oral language to particular audiences, situations, and purposes.	a. respond to questions from teachers and peers in a classroom situation. b. give directions and make oral reports. c. read aloud a variety of written materials. d. participate in conversations and group discussions. e. speak on the telephone courteously and correctly.
9. listen and respond for a variety of purposes.	a. identify sounds and their sources. b. understand directions, announcements, and introductions. c. follow oral directions. d. overcome distractions to listen for what is important. e. listen courteously to others. f. listen to and retell stories. g. listen critically to formulate questions and make judgments. h. listen for pleasure, e.g., song lyrics, verse, stories.
10. use a variety of techniques to express thoughts and feelings and to respond to others.	a. participate and enjoy imaginative situations, e.g., storytelling and creative dramatics. b. engage in a variety of imaginative speaking activities, such as storytelling, role-playing, oral games, and impersonations. c. initiate and continue conversations.

WRITING (021400)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **writing** at kindergarten through grade three, students should	Students will
11. engage in a process that includes prewriting, drafting, peer sharing, revising, editing, and publishing.	a. write regularly for uninterrupted periods of time. b. understand that a writer does not begin with a form but with something to say. c. generate ideas using a variety of strategies, e.g., drawing, discussing, brainstorming, clustering, question and answer. d. select topics of personal interest. e. use a variety of resources to research a topic. f. identify audience and purpose. g. write initial drafts with emphasis on content. h. read the drafts aloud to "hear" the message. i. share drafts with peers and/or teachers. j. improve writing based on peer response. k. use a dictionary and other resources to revise. l. prepare drafts for teacher evaluation or publication, e.g., bulletin boards, displays, class books.
12. write for different purposes and audiences, using a variety of forms.	a. draw pictures which tell stories and convey messages. b. dictate personal experiences, stories, poems. c. write stories and poems using pictures and "invented" spelling. d. write simple stories using sentences in narrative sequence. e. write books based on predictable patterns. f. write personal letters and messages to communicate ideas, experiences, or opinions. g. write log, notebook, or journal entries to express feelings, discover ideas, and to be imaginative. h. write directions to describe a process. i. write to record important information, e.g., lists of things to do, assignments, new words.

Specific Proficiency Statements	**Proficiency Indicators**
13. use appropriate forms of written English at the "publication" or final stage of their own writing.	a. recognize that the words they write are graphic representations of the words they speak. b. develop legible handwriting to enhance the effectiveness of the "published" message. c. begin to recognize and follow accepted conventions of spelling, punctuation, capitalization, and usage.

Proficiency List 022000

READING/LITERATURE (022100)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **reading/literature** at the upper elementary level, students should	Students will
1. **develop curiosity and a lifelong interest in a range of reading materials representing a variety of cultures, times, literary forms, and subject areas.**	a. use leisure time for reading, viewing, and listening to a variety of literature. b. initiate reading for extension of individual knowledge. c. interact with a variety of printed materials, e.g., fiction, plays, magazines, radio scripts, textbooks. d. read regularly for uninterrupted periods of time. e. develop habits of reading that carry over into adult life. f. choose library books on topics of personal interest.
2. **develop independent reading strategies and adapt them to the particular contexts, purposes for reading, choices of materials, and stance toward the materials.**	a. use word recognition skills as a means to comprehension. - use phonetic analysis and structural analysis to identify words and/or to construct meaning. - develop and expand word meaning through prefixes, suffixes and root words, compound words, and multiple meanings.

Specific Proficiency Statements

Sample Indicators

b. comprehend the material they read.

- understand and bring meaning to the words, phrases, and sentences they encounter in their reading.
- understand and bring meaning to reading by recognizing and recalling details, main ideas, sequence, character traits, and cause/effect relationships, by making comparisons, and by paraphrasing.
- draw inferences from their reading by interpreting, hypothesizing, drawing logical conclusions, and predicting outcomes.

c. use reading skills in the gathering, retaining, and analyzing of information.

- alter their method of reading in relation to the type of materials they are reading and the purpose for reading.
- use study skills to gather and organize the material they have read, e.g., identifying and using guide words in dictionaries and encyclopedias, locating and using parts of books, such as the index and table of contents, using formatting cues (headings, underlining) to locate information.
- apply and use reading skills in the content areas, e.g., identifying main ideas and details in science and social studies passages.
- locate and use a variety of resources, e.g., dictionary, encyclopedia, and library books.

d. apply the reading skills they acquire in school to situations they encounter in everyday life.

- follow written directions, such as warning labels and signs, medicine labels, product labels, and directions for use.
- understand abbreviations and symbols.
- locate information in directories, newspapers, and catalogs.
- read and make use of print media, e.g., newspapers, magazines, pamphlets.

Specific Proficiency Statements	**Proficiency Indicators**
3. think critically and reflectively through reading.	a. form critical judgments. - differentiate fact from opinion. - distinguish reality from fantasy. - explain stated and implied cause/effect relationships. - discuss an author's purpose and perspective. b. see relationships between what they read and what they have previously read, learned, and experienced. - compare characters in different stories. - compare the same story presented in different media.
4. respond actively and imaginatively to the literature they encounter.	a. share information about favorite books and favorite authors. b. respond to literature in a variety of ways, e.g., writing, oral discussion, art projects, and drama. c. compose original endings to stories and plays. d. retell favorite stories in their own words.
5. recognize that literary representations of individuals, events, and society are influenced by the perceptions of the writer and the perceptions of the reader.	a. discuss the behavior, traits, motives, and relationships of characters. b. recognize that literary works can be read and compared from different perspectives, e.g., theme, chronology, author. c. begin to recognize and discuss how personal perceptions and tastes affect reading. d. begin to become familiar with important writers and masterpieces of literature both past and present.
6. develop strategies for making independent critical evaluations	a. recognize literary forms and explain how they differ, e.g., fables, science fiction, biography. b. recognize some of the conventional structures in literary works, e.g., rhythmical patterns, rhyme scheme, figures of speech. c. make individual personal determination of worth, desirability, and acceptability of various pieces of literature.

LANGUAGE (022200)

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **language** at the upper elementary level, students should	Students will
7. view language as a powerful tool for learning and thinking and as a source of pleasure.	a. use language to express, analyze, and enlarge upon thoughts and ideas. b. listen to, manipulate, and analyze words. - play with sounds and rhythms of words. - make up word games, puns, and jokes. - speculate about the possible meaning of new words. - be curious about unfamiliar words and use dictionary to determine meaning.
8. recognize varieties of language use and adjust use to audience, purpose, and situation.	a. recognize how language is used to influence the thoughts, attitudes, and behavior of others. - identify words or sentences that evoke a desired response from others or themselves. - identify situations in stories they have read, heard, or viewed which depict a person being influenced by the language of someone else. - recognize how advertisers, politicians, representatives of the mass media, and recording stars can manipulate language for specific purposes. b. compare the advantages and disadvantages of radio, television, film, newspapers, and periodicals as instruments of persuasion. c. discover how the attitudes, experiences, knowledge, and values of a listener and/or reader can contribute to any given message. d. identify places where they hear different types of language spoken and suggest reasons for the different language uses. e. use appropriate conventions of usage and mechanics in formal speaking and writing situations.

Specific Proficiency Statements	**Sample Indicators**
9. gain a functional understanding of the structure and history of the English language.	a. understand how the English language has developed, continues to change, and survives because it is adaptable to changing times. - identify some ways by which words have been added to the language, e.g., compounding, using affixes, making acronyms, borrowing from other languages, and being influenced by social, political, and scientific changes. - discover advantages and disadvantages of spoken, pictorial, symbolic, and written language. b. recognize that every language must have a system. - show awareness of how grammar represents the orderliness of language and makes meaningful communication possible. - understand some basic grammatical concepts. - explain some of the reasons for "standard usage." - recognize and use conventional forms of the English language.

ORAL COMMUNICATIONS (022300)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **oral communications**, i.e., **speaking** and **listening**, at the upper elementary level, students should	Students will
10. adapt oral language to particular audiences, situations, and purposes.	a. speak before an audience for a variety of purposes, such as giving directions, reporting, and demonstrating specific activities. b. demonstrate ease in a variety of conversational situations. c. participate as members and/or leaders in group discussions. d. ask questions to clarify and extend information. e. answer questions clearly. f. restate ideas from a discussion or conversation.

Specific Proficiency Statements	**Sample Indicators**
11. listen and respond for a variety of purposes.	a. listen carefully and respond appropriately during conversations and discussions. b. listen for specific information, e.g., main ideas, details, answers to questions. c. listen critically to formulate questions and make judgments. d. listen for pleasure, e.g., lyrics, verse, stories. e. listen to stimulate creativity and self growth. f. recognize and interpret non-verbal cues, e.g., symbols, body language, appearance.
12. use a variety of techniques to express thoughts and feelings and to respond to others.	a. respond orally to questions from teachers and peers in a classroom situation. b. incorporate creative devices into speaking, such as figurative phrases, jingles, original words, and anecdotes. c. enhance spoken messages through the use of non-verbal techniques such as facial expressions, bodily movements, and gestures. d. speak expressively by varying volume, rate, and intonation.

WRITING (022400)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **writing** at the upper elementary level, students should	Students will
13. engage in a process that includes prewriting, drafting, peer sharing, revising, editing, and publishing.	a. write regularly for uninterrupted periods of time. b. understand that a writer does not begin with a form but with something to say. c. generate ideas using a variety of strategies, e.g., brainstorming, clustering, mapping, question and answer. d. select topics of personal interest. e. use a variety of resources to research a topic. f. identify audience and purpose.

Specific Proficiency Statements	Sample Indicators
	g. choose a method of organizing that is appropriate to audience and purpose. h. write initial drafts with emphasis on content. i. read drafts aloud to "hear" the message. j. share drafts with peers and/or teachers. k. improve writing based on peer and/or teacher response. l. revise structural elements to clarify meaning. m. revise for clarity, coherence, and unity. n. use a dictionary, thesaurus, and other resources to revise. o. proofread and/or edit for manuscript conventions, i.e., spelling, capitalization, punctuation. p. prepare drafts for teacher evaluation or some form of publication, e.g., school newspaper, display, class reports.
14. write for different purposes and audiences, using a variety of forms.	a. write imaginative stories, skits, and poems. b. write personal letters and messages to communicate ideas, experiences, or opinions. c. write journal entries to express feelings, to discover what they know, and to free their imaginations. d. write summaries and reports of events or situations. e. write to persuade the reader to perform some action or change an opinion. f. write directions to describe a process. g. write to record important information, e.g., lists of things to do, assignments, new words. h. write biographical sketches. i. write from different points of view. j. write business letters.
15. use acceptable forms of written English at the "publication" or final stage of writing.	a. prepare final drafts in a form that is appropriate for the audience and purpose. b. use legible handwriting, word processing, or typing to enhance the effectiveness of their message. c. follow accepted conventions of spelling, punctuation, capitalization, and usage. d. use conventional format, e.g., paragraph indentation and letter writing conventions.

ENGLISH LANGUAGE ARTS
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 023000

READING/LITERATURE (023100)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **reading/literature** at the middle/junior high school level, students should	Students will
1. develop curiosity and a lifelong interest in a range of reading materials representing a variety of cultures, times, literary forms, and subject areas.	a. use leisure time for reading, viewing, and listening to a variety of literature. b. initiate reading for extension of individual knowledge. c. interact with a variety of printed materials, e.g., stories, plays, essays, newspapers, textbooks. d. read regularly for extended periods of time. e. develop habits of reading that carry over into adult life. f. choose library books on topics of personal interest.
2. develop independent reading strategies and adapt them to the particular contexts, purposes for reading, choices of materials, and stance toward the materials.	a. comprehend the material they read. - use strategies to develop and/or expand word meaning, e.g., vocabulary study. - understand both stated and implied meaning. b. adapt their method of reading to the type of material they are reading and to their purpose for reading. - recognize that they can and should read differently for different purposes. - vary reading speed according to purpose for reading. - skim and scan to obtain information quickly.

Specific Proficiency Statements **Sample Indicators**

c. use reading skills in the gathering, retaining, and analyzing of information.

  - use study skills to gather and organize the material they have read, e.g., use the card catalog or computer listing to locate information in the library ; use note-taking techniques to select and record information.
  - apply and use specialized reading skills needed in the content areas, e.g., comprehend the meaning of technical vocabulary; interpret illustrations, figures, and charts.
  - locate, read, and use a variety of primary and secondary sources.

d. apply the reading skills they acquire in school to situations they encounter in everyday life.

  - read and interpret the persuasive strategies used in advertisements.
  - read and follow directions in catalogs and manuals.
  - read and complete simple forms, e.g., job applications, club membership forms.
  - read newspapers critically, understanding the different purposes of the various parts of the paper, e.g., news vs. editorials.

3. think critically and reflectively through reading.

a. form critical judgments.

  - judge an author's purpose, perspective, and expertise.
  - understand that reactions to and perceptions of printed material are affected by many factors.

b. see relationships between what they read and what they have previously read, learned, and experienced.

  - compare different presentations of the same subject or theme.
  - recognize and discuss ways in which literature mirrors life and reflects human values, motives, and conflicts.

Specific Proficiency Statements	**Sample Indicators**
4. respond actively and imaginatively to the literature they encounter.	a. participate actively in discussions about literature. b. choose to watch a dramatic presentation based on a work they have read. c. choose to read other works by a favorite author or other works on a subject of interest. d. dramatize a scene from a favorite work or a monologue of a favorite character. e. incorporate examples from literature into writing and speaking.
5. recognize that literary representations of individuals, events, and society are influenced by the perceptions of the writer and the perceptions of the reader.	a. analyze literary works from different perspectives, e.g., theme, author, chronology. b. recognise that literary works can evoke a variety of responses that are dependent on the cultural, ethical, religious, intellectual, and/or emotional backgrounds of readers, listeners, and viewers. c. become aware of important writers representing diverse backgrounds and traditions in literature. d. become familiar with masterpieces of literature both past and present.
6. develop strategies for making independent critical evaluations of literary works.	a. recognize and understand the features of various literary genre, e.g., short story, romance, autobiography. b. recognize and understand some of the recurring features in literary works, e.g., figurative language, irony, satire, symbolism. c. distinguish between criticism based on literary criteria and criticism based on personal taste. d. identify the author's point of view and stance toward the subject. e. recognize relationships between literary works and other art forms.

LANGUAGE (023200)

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **language** at the middle/junior high school level, students should	Students will
7. **view language as a powerful tool for learning and thinking and as a source of pleasure.**	a. use language to discover and/or convey meaning. - use writing and speaking to express ideas and clarify meaning. - use language to solve problems. b. listen to, manipulate, and analyze words. - solve puzzles and play word games. - enjoy jokes, riddles, and puns. - investigate etymologies.
8. **recognize varieties of language use and adjust use to audience, purpose, and situation.**	a. analyze ways in which language is used to influence the thoughts, attitudes, and behavior of others. - assess the impact of connotative or emotionally charged words upon a listener or reader. - analyze the values presented in a film, song, or television program. b. recognize how advertisers, politicians, representatives of the mass media, and recording stars can manipulate language for specific purposes. - recognize and analyze persuasive appeals used by advertisers and politicians. - discover how the attitudes, experiences, knowledge, and values of a listener and/or reader can contribute to any given message.

Specific Proficiency Statements	**Sample Indicators**
	c. understand the nature of dialect and recognize some of the unique characteristics of their own and other English dialects. - give examples of the ways that pronunciations and word usages vary locally and nationally. - identify some of the ethnic, cultural, and geographic factors that have influenced the development of various English dialects. - analyze the reasons (economic and social) for the acceptance of one dialect over another by certain segments of society. - examine the use of dialect in various literary and media forms.
9. gain a functional understanding of the structure and history of the English language.	a. understand how the English language has developed, continues to change, and survives because it is adaptable to new times. - discover advantages and disadvantages of spoken, pictorial, symbolic, and written language. - investigate the causes of irregularities in the rules and regulations of the English language system. - use sources of information about the English language, e.g., handbook, dictionary, thesaurus. b. recognize that every language must have a system. - show awareness of how grammar represents the orderliness of language and makes meaningful communication possible. - recognize and use basic sentence patterns in writing and speaking. - use standard usage in writing and speaking.

ORAL COMMUNICATIONS (02300))

Specific Proficiency Statements	**Proficiency Indicators**
Through learning opportunities provided in **oral communications**, i.e., **speaking** and **listening**. at the middle/junior high school level, students should	Students will
10. adapt oral language to particular audiences, situations, and purposes.	a. prepare and present oral reports for informational and persuasive purposes. b. use oral language to solve problems and resolve conflicts. c. draw others into conversations by using appropriate questions. d. express differences of opinion with others without antagonizing or hurting listeners. e. anticipate questions and criticism from listeners. f. participate in panel discussions.
11. listen and respond for a variety of purposes.	a. listen to lectures, speeches, and media presentations, and record main ideas and details. b. summarize and paraphrase information from lectures, speeches, and media presentations. c. listen critically to determine persuasive appeals. d. listen critically to determine accuracy of information. e. listen critically to offer constructive criticism to others.
12. use a variety of techniques to express thoughts and feelings and to respond to others.	a. choose a medium or media that will be most effective for delivering a particular message. b. choose topics and methods of presentation that are appropriate to the audience. c. incorporate creative devices into speaking, such as figurative phrases, jingles, original words, and anecdotes. d. enhance spoken messages through the use of nonverbal techniques such as facial expressions, bodily movements, and gestures. e. use the mechanics of speech such as proper enunciation, effective pauses, adequate volume, and appropriate rate.

WRITING (023400)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **writing** at the middle/junior high school level, students should	Students will
13. engage in a process that includes prewriting, drafting, peer sharing, revising, editing, and publishing.	a. write regularly for uninterrupted periods of time. b. understand that a writer does not begin with a form but with something to say. c. generate ideas using a variety of strategies, e.g., brainstorming, clustering, free writing, cubing. d. select topics of personal interest. e. use a variety of resources to research a topic. f. identify and analyze audience and purpose. g. choose a method of organizing that is appropriate to audience and purpose. h. write initial drafts with emphasis on content. i. read drafts aloud to "hear" the message. j. share drafts with peers and/or teachers. k. improve writing based on peer and/or teacher response. l. revise structural elements to clarify meaning. m. revise drafts for clarity, coherence, economy, and unity. n. use sentence combining to improve style and coherence. o. use a dictionary, thesaurus, grammar handbook, and other resources in revising and editing. p. proofread and/or edit for conventions, i.e., spelling, capitalization, punctuation. q. prepare drafts for teacher evaluation or publication, e.g., school newspaper, literary publication, mailing.
14. write for different audiences and purposes, using a variety of forms.	a. keep journals, logs, or notebooks to express feelings, record ideas, discover new knowledge, and free the imagination. b. write personal letters and messages to communicate ideas, experiences, or opinions. c. write business letters to request information, express ideas and opinions, and make complaints.

Specific Proficiency Statements	Sample Indicators
	d. write summaries and reports of events or situations. e. write to persuade the reader to perform some action or change an opinion. f. write directions and describe processes and procedures. g. write to record important information, e.g., lists of things to do, assignments, new words. h. write biographical and autobiographical sketches. i. write short stories, plays, and poems. j. summarize and paraphrase the writing and speaking of others, e.g., take notes on films, lectures, or speeches. k. write essays, e.g., personal experience or literary analysis. l. write reports, e.g., book reports, technical reports for science, research reports for social studies. m. write from different points of view. n. fill out complex forms, e.g., application forms, tax forms, insurance forms, accident forms. o. present quality, in-depth written ideas in a sensitive and provocative style.
15. use acceptable forms of written English at the "publication" or final stage of their own writing.	a. use neat and legible handwriting, typing, or word processing to enhance the effectiveness of the written communication. b. select a format that is appropriate for the audience and purpose for writing. c. use conventions of manuscript form that are appropriate for a given form of writing. d. follow accepted conventions of spelling, punctuation, capitalization, and usage.

ENGLISH LANGUAGE ARTS
HIGH SCHOOL LEVEL

Proficiency List 024000

READING/LITERATURE (024100)

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **reading/literature** at the high school level, students should	Students will
1. **develop curiosity and a lifelong interest in a range of reading materials representing a variety of cultures, times, literary forms, and subject areas.**	a. use leisure time for reading, viewing, and listening to a variety of literature. b. initiate reading for extension of individual knowledge. c. interact with a variety of printed materials, e.g., periodicals, novels, essays, historical documents, technical manuals. d. read regularly for extended periods of time. e. develop habits of reading that carry over into adult life. f. choose library books on topics of personal interest.
2. **develop independent reading strategies and adapt them to the particular contexts, purposes for reading, choices of materials, and stance toward the materials.**	a. comprehend the material they read. b. adapt method of reading to type of material and purpose for reading. c. use reading skills in the gathering, retaining, and analyzing of information. - use study skills to gather and organize the material they have read, e.g., use periodical indexes to locate information for reports; organize information gathered from multiple sources. - apply and use specialized reading skills in the content areas, e.g., interpret and use footnotes and bibliographies in reference works; interpret tables, graphs, figures, and other pictorial representations of information. - locate, read, and use a variety of resources.

Specific Proficiency Statements	**Sample Indicators**
	d. apply the reading skills they acquire in school to situations they encounter in everyday life. - evaluate persuasive strategies in speeches, advertisements, editorials, and essays. - read and utilize applications, legal agreements, manuals, and other materials relating to employment and money management. - read and interpret consumer-related information, e.g., product labels, directions for use, warranties and guarantees.
3. think critically and reflectively through reading.	a. form critical judgments. - distinguish between objective and subjective presentations of information and events. - judge an author's purpose, perspective, and expertise. - understand that reactions to and perceptions of printed material are affected by many factors. - distinguish between "good" and "bad" reading material on the basis of personal criteria. - recognize assumptions behind and implications of what they read.
	b. see relationships between what they read and what they have previously read, learned, and experienced. - form new relationships and experience fresh insights as a result of reading. - make original connections between old and new information. - compare and contrast themes, characters, and plots in different literary works.
4. respond actively and imaginatively to the literature they encounter.	a. initiate and participate in discussions and conversations about literature. b. recommend works they have read to others. c. imitate the style and form of favorite authors. d. participate in literary and drama clubs. e. enter literary contests and submit works to literary magazines. f. discover reflections of personal values in literature.

Specific Proficiency Statements	**Proficiency Indicators**
5. recognize that literary representations of individuals, events, and society are influenced by the perceptions of the writer and the perceptions of the reader.	a. discuss the influences of writers' backgrounds on their works. b. recognize how historical events are reflected in the works of a given period. c. compare masterpieces of literature and authors of different periods. d. discuss how contemporary writing reflects past literary traditions and movements. e. discuss how their values, attitudes, and biases influence their reading.
6. recognize the unique advantages and disadvantages of various literary and media forms for human expression.	a. explain the relationship between form and content in literary and media works. b. analyze differences between a literary work and a movie based on the same work. c. become aware of the relationships between literary works and other art forms such as dance, music, sculpture, and architecture. d. compare and contrast authors' views of human existence in literary works of the same form and in literary works of different forms.
7. develop strategies for making independent critical evaluations of literature.	a. recognize and understand the features of various literary genres, e.g., comedy, tragedy, epic, novel. b. recognize and understand the function of some recurring conventions in literary works, e.g., allusions, analogies, chorus. c. make individual, personal determinations of worth, desirability, and acceptability of various pieces of literature. d. distinguish between criticism based on literary criteria and criticism based on personal taste. e. identify and use criteria used by professional critics, e.g., film reviewers, book reviewers, and drama critics to evaluate literary work. f. recognize that some literary works may conflict with the values of individuals or groups.

LANGUAGE (024200)

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **language** at the high school level, students should	Students will
8. **view language as a powerful tool for learning and thinking and as a source of pleasure.**	a. use language to discover and/or convey meaning. - use language to express and solve problems. - use language to explore new ideas and relationships. b. listen to, manipulate, and analyze words. - recognize figurative language and understand its literal meaning. - create analogies and metaphors to explain difficult concepts. - recognize denotative and connotative meanings of words. - appreciate humor created by words and incorporate devices for creating humor into speaking and writing.
9. **recognize varieties of language and adjust use to audience, purpose, and situation.**	a. analyze ways in which language is used to influence the thoughts, attitudes, and behavior of others. - illustrate how people can be influenced by language with examples from literature, history, media, or personal experience. - recognize ways in which they use language to influence others. b. recognize how advertisers, politicians, representatives of the mass media, and recording stars can manipulate language for specific purposes. - compare advantages and disadvantages of radio, television, film, newspapers, and periodicals as instruments of persuasion. - identify the values presented in advertisements, song lyrics, and political and religious speeches.

Specific Proficiency Statements	**Sample Indicators**
	c. understand the nature of dialect and recognize some of the unique characteristics of their own and other English dialects. - identify some of the ethnic, cultural, and geographical factors that have influenced the development of various English dialects. - appreciate the use of dialect in literary works.
	d. select a usage level appropriate for a given audience or purpose. - recognize that different audiences and situations require different types of language use. - understand the differences between formal and informal language situations. - use accepted conventions of standard English usage and mechanics in formal writing and speaking situations.
10. gain a functional understanding of the structure and history of the English language.	a. understand how the English language has developed, continues to change, and survives because it is adaptable to new times. - discuss some of the reasons why language changes. - give examples of language changes from history and contemporary life. - hypothesize about how language may change in the future. - explore the influence of English on other languages and cultures. - explore the influences of technology on language.
	b. recognize that every language must have a system. - understand that grammar represents the orderliness of language and makes meaningful communication possible. - acquire a basic vocabulary of grammatical terms. - apply knowledge of grammatical concepts to communication situations. - understand and use accepted conventions of usage and mechanics in writing and speaking.

ORAL COMMUNICATIONS (024300)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **oral communications**, i.e., **speaking** and **listening**, at the high school level, students should	Students will
11. adapt oral language to particular audiences, situations, and purposes.	a. contribute to class and small group discussions. b. present a position persuasively. c. give impromptu presentations and formal speeches. d. ask and answer questions in an interview situation. e. participate in panel discussions and debates. f. adapt oral language to different audiences and to formal and informal situations.
12. listen and respond for a variety of purposes.	a. identify the main ideas from various types of oral presentations, e.g., class discussions, lectures, speeches, films. b. synthesize and paraphrase information presented orally. c. listen carefully in order to ask follow-up questions in an interview.
13. use a variety of techniques to express thoughts and feelings and to respond to others.	a. choose media and techniques that most effectively present a particular message to a given audience. b. read material aloud, using dramatic techniques to convey meaning to the audience. c. adjust voice and speech pattern when depicting characters in a dramatic situation. d. incorporate nonverbal techniques and audiovisual devices into oral presentations. e. adjust gesture, tone of voice, and speech patterns to different oral communication situations. f. use the mechanics of speech such as proper enunciation, effective pauses, adequate volume, and appropriate rate. g. utilize organizational techniques such as outlining and preparing note cards, to give coherence to formal presentations. h. show evidence of independent thought and creativity in content and delivery.

WRITING (024400)

Specific Proficiency Statements

Through learning opportunities provided in **writing** at the high school level, students should

14. engage in a process that includes prewriting, drafting, peer sharing, revising, editing, and publishing.

Sample Indicators

Students will

a. write regularly for uninterrupted periods of time.
b. understand that a writer does not begin with a form but with something to say.
c. generate ideas using a variety of strategies, e.g. brainstorming, clustering, looping, mapping, free writing.
d. select topics of personal interest.
e. use a variety of primary and secondary sources to research a topic.
f. identify and analyze audience and purpose.
g. choose a voice and a method of organization that are appropriate to audience and purpose.
h. write initial drafts with emphasis on content.
i. read drafts aloud to "hear" the message.
j. share drafts with peers and/ or teachers.
k. improve writing based on peer and/or teacher response.
l. revise structural elements to clarify meaning.
m. use sentence combining to improve style and coherence.
n. revise drafts for clarity, coherence, economy, and unity.
o. use a variety of resources in revising and editing, e.g., dictionary, grammar handbook, thesaurus.
p. proofread and/or edit for conventions, i.e., spelling, capitalization, punctuation.
q. prepare drafts for teacher evaluation or publications, e.g., school or local newspaper, mailing, contest, literary magazine.

Specific Proficiency Statements	Sample Indicators
15. write for different audiences and purposes, using a variety of forms.	a. keep journals, logs, or notebooks to express feelings, record ideas, discover new knowledge, and free the imagination. b. write personal letters and messages to communicate ideas, experiences, or opinions. c. write business letters to request information, express ideas and opinions, and make complaints. d. write summaries and reports of events, books, speeches, and lectures. e. write to persuade the reader to perform some action or change an opinion. f. describe procedures and processes and give clear and accurate directions. g. write to record important information, e.g., lists of things to do, assignments, new words. h. write biographical and autobiographical sketches. i. write short stories, plays, and poems. j. summarize and paraphrase the writing and speaking of others, e.g., take notes on films, lectures, or speeches. k. write formal essays, e.g., personal experience, argumentative discourse. l. write literary criticism and literary analysis. m. write reports, e.g., book and movie reports, technical reports in science, research reports in social studies. n. write research papers. o. complete essay examinations in different subject areas. p. fill out complex forms, e.g., application forms, tax forms, insurance forms, accident forms. q. present quality, in-depth written ideas in a sensitive and provocative style.
16. use acceptable forms of written English at the "publication" or final stage of writing.	a. use neat and legible handwriting, typing, or word processing to enhance the effectiveness of the written communication. b. select a format that is appropriate for the audience and purpose for writing. c. use conventions of manuscript form that are appropriate for a given form of writing. d. follow accepted conventions of spelling, capitalization, punctuation, and usage. e. document sources accurately, e.g., bibliography, footnotes. f. use formatting cues and graphic devices to convey meaning and enhance appearance.

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MATHEMATICS

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INTRODUCTION

The Mathematics Proficiency Guide has been developed by an ad hoc committee of mathematics educators under the auspices of the Superintendent, Indiana Department of Education. It is meant to be used by local educators as a guide to the development of local mathematics curriculum.

Although the proficiencies acknowledge the importance of routine mathematics skills, they also emphasize conceptual understanding, higher-order problem-solving skills, and positive attitudes towards mathematics. The recommendations are consistent with those of the National Academy of Sciences, the National Academy of Engineering, the National Research Council, and the National Council of Teachers of Mathematics. They are also supported by an impressive body of research evidence that ranges from national surveys, such as the Third National Assessment of Educational Progress, to in-depth studies of how students actually learn mathematics. In general, the proficiency statements outline the essential mathematical skills and understanding that students must develop if they are to be adequately prepared for the twenty-first century.

The materials contained in this guide, as in all previous guidelines in mathematics, are not intended to replace locally developed mathematics curricula or courses of study. However, if deemed appropriate, any portion of this publication may be reproduced without permission from the Indiana Department of Education. It is hoped that Indiana educators will find this guide useful as they produce mathematics curriculum plans.

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STATEMENT OF PHILOSOPHY

Throughout recorded history, mathematics has held an important place in human culture. In spite of its early origins, however, mathematics remains a changing, dynamic subject, affected by the changes in research and technology and the demands of a modern economy. To keep pace with these changes, an evolving curriculum guide is a necessity.

It is the purpose of this guide to provide a framework for schools to use in developing a local mathematics curriculum plan. The proficiency statements are meant to suggest an agenda for a change in the focus of the mathematics program. Our goal is an enlightened, progressive, problem-solving approach to life in the twenty-first century.

RECOMMENDATIONS

Elementary School

The Specific Proficiency Statements for elementary grades were developed after consideration of the recommendations of the National Council of Teachers of Mathematics and the Indiana Council of Teachers of Mathematics, other organizations concerned with mathematics education, and a knowledge of current research in teaching and learning. The total program for elementary students includes both computation and understanding of the structure of the subject. The program must include both essentials of mathematics within a total framework that stresses experience and application of concepts and skills.

Experience in estimating and recognizing answers as reasonable is an essential skill which must be developed. Applying skills to solve problems is another priority at all levels of the mathematics curriculum. While the guide emphasizes problem solving as one of the specific proficiencies to be acquired, it is also intended to be an integral part of all concept and skill development. The curriculum should provide all students with the opportunity to develop proficiency at problem solving.

Students develop mathematical concepts through concrete experience with manipulative materials. The development of concepts and skills from the concrete level to the connecting level and then to the abstract level is accomplished through activities deliberately designed to help students make the transitions. The following list identifies the manipulative materials recommended for any elementary mathematics classroom:

- Attribute Blocks
- Base Ten Blocks
- Calculators
- Decimal Models
- Fraction Models
- Geoboards
- Geometric Models
- Interlocking Centimeter Cubes
- Interlocking Counting Cubes
- Objects for counting and sorting -
  - Buttons, stones, shells, etc.
- Objects for measuring with nonstandard units -
  - Interlocking links, paper clips, sticks, etc.
- Measuring Instruments -
  - Scale or balance
  - Rulers, tape measures, trundle wheels
  - Volume measures, such as cups, spoons, etc.
  - Thermometers
  - Clocks
  - Pattern Blocks
  - Play Money
  - Probability Devices
  - Tangrams

Middle/Junior High School

Students in the middle grades should have opportunities to review and extend skills from the elementary grades, as well as develop additional proficiencies in topics that were not previously introduced. Through applications of mathematics, students should have opportunities to develop an appreciation and understanding of the role mathematics will play in determining future career and employment opportunities. Experience with calculators and computers should be integrated into courses at this level. The use of manipulatives for concept development is also appropriate at this level.

A number of topics are presented at the seventh and eighth grade levels to prepare students for high school mathematics, especially for algebra and geometry. Students should be provided with experiences which are designed to help them make the transition from the concrete and symbolic levels to an abstract level of reasoning that will be necessary for future success in mathematics. Students who are proficient in the content of these courses will be prepared to succeed in high school mathematics.

Problem solving is not only included as a specific proficiency, but it should be an integral part of all topics covered in these years. The curriculum should provide opportunities for students to develop skills and strategies for solving new and nontraditional types of problems.

Senior High School

The high school proficiency statements are written at three levels in recognition of the differing needs of the high school population and the different requirements of career choices that students may make during their high school years or at a later date. The secondary curriculum should be geared to providing these students with more than just experience with manipulative procedures. The curriculum must afford students opportunities to work with basic concepts of arithmetic, algebra, geometry, descriptive statistics, discrete mathematics, and decision making in the face of uncertainty.

In addition to these areas of mathematics, the curriculum must also provide opportunities for the construction of symbolic and abstract models. A student's discovery of the internal structure and logical cohesion of mathematical systems is an important understanding to be provided in the mathematics curriculum. The goal in every school curriculum should be to provide opportunities for four years of valuable mathematical experiences for students of all interests and abilities.

EVALUATION

Evaluation is an important part of the instructional program in school mathematics and should be more than a terminal judgment of a student's work for grading purposes. It should also be used to determine how well the goals and objectives of the instructional program are being achieved by the student and to identify difficulties which may be encountered by the student in the learning processes.

Evaluation, to be effective, must be a continual process. It should be used not only as a terminal activity but also throughout the student's learning experience to determine whether a planned instructional strategy has been effective. It may also be used to diagnose the nature of a student's difficulty in order to plan remediation.

Assessment of student attitudes, teacher effectiveness, and program effectiveness are other components of a good evaluation plan. With acceptance of the mathematics proficiencies as a basis for local mathematics curriculum, there must then be attention given to developing ways in which the progress toward these goals will be monitored. The evaluation of problem-solving performance will demand new approaches to measuring success. Innovative techniques must be developed if we are to fairly assess the development of these skills. Evaluation of programs with problem-solving goals must be sensitive to the nature of these goals. It is imperative that the goals of the mathematics program dictate the nature of the tests and other evaluations, rather than the tests dictating the goal of the school mathematics program.

USE OF THE GUIDE

The Mathematics Proficiency Guide is intended to be a living document, subject to continual review and revision such as is recommended for local curriculum guides. The standards which are expressed in the proficiency statements represent the current ideals for mathematics education based on research, knowledge of the student as a learner, and the current organization of schools. It was the intention of the writers to produce a document that would be a forward-looking expression of the learning opportunities needed by students who will be the citizens of the twenty-first century.

While this document is not intended to be prescriptive, it is designed with the belief that local curriculum developers will find direction and guidance as they plan for continued improvement in mathematics education for all students.

CURRICULUM DEVELOPMENT

The curriculum development model in the Indiana Curriculum Proficiency Guide provides a description of the steps involved in the continuous process of review and revision of curriculum. Mathematics educators who plan to use this model for local curriculum development may want to ask the following questions:

1. Develop Vision Statement - Is there strong support from the school board and the community for curriculum change?
2. Assess Needs - Have teachers, administrators, students, and the public been given opportunity to identify needs?
3. Examine State Proficiencies - Have local educators thoroughly reviewed the proficiencies in mathematics?
4. Set Program Goals - Can materials, methods, and evaluation be based on these goals?
5. Implement Program - Have all those involved in implementation been provided with inservice and ongoing support?
6. Evaluate Program - Is the plan to evaluate success consistent with goals of the program?

The curriculum development process should elicit active teacher support of a consensus curriculum - what **should** be taught. The process may result in a scope-and-sequence chart, a list of performance objectives, or detailed units of study complete with time lines and supplementary materials to be used. Any product should be considered as one of the resources available to classroom teachers, just as the Mathematics Proficiency Guide is a resource available to local mathematics curriculum committees.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency,** as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling. In mathematics, these statements are listed by developmental levels - kindergarten/primary, upper elementary, middle/junior high school, and senior high school - Levels I, II, and III.

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C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in mathematics. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **mathematics** proficiencies:

Foundation Proficiency Statements	050000
Specific Proficiency Statements	
Kindergarten/Primary	051000
Upper Elementary	052000
Middle/Junior High School	053000
Senior High School	
Level I	054001
Level II	054002
Level III	054003

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS - MATHEMATICS

List 050000

Students in Indiana schools will be provided learning experiences in **mathematics** which allow them to:

1. develop a positive attitude toward mathematics and appreciate the role of mathematics as a factor in personal growth, as a method for making predictions about societal trends, and as a model for abstract reasoning.
2. develop a conceptual framework of mathematical ideas expressed as numbers, words, symbols, and figures.
3. acquire skills necessary to perform routine manipulations and standard algorithmic procedures.
4. acquire skills in visualizing and interpreting mathematical relationships and communicating these ideas.
5. acquire skills in selecting and applying relevant data to solve routine and non-routine problems.
6. acquire skills necessary to utilize technology as a part of the mathematical process.

MATHEMATICS
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 051000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **mathematics** at kindergarten through grade three, students should	Students will
1. **develop a positive attitude toward mathematics and be able to describe its role and interrelationship with other areas.**	a. communicate mathematical ideas verbally. b. use mathematical concepts in everyday problem-solving situations. c. recognize mathematics as more than computational skill.
2. **use number sentences to demonstrate relationships among whole numbers.**	a. infer one arithmetic fact from another. **Examples:** given 6 + 4 = 10, determine 7 + 3. given 3 + 4 = 7, determine 7 - 4. given 8 + 4 = 12, determine 8 + 5. given 3 + 2 = 5, determine 2 + 3. given 8 + 8 = 16, determine 8 + 7. given 12 + 1 = 13, determine 12 + 2.
3. **demonstrate an understanding of the place value system for whole numbers.**	a. use place value models to represent numbers. b. use ten as a unit or as a collection of ten objects. c. use a hundred as a unit or as a collection of units. d. express a number in various forms. **Example:** 53 = 5 tens and 3 ones = 4 tens and 13 ones.
4. **use fractions to express mathematical concepts and relationships.**	a. identify various representations for a given fraction. b. write a fraction for a given representation.

Specific Proficiency Statements	Sample Indicators
5. demonstrate computational skills with whole numbers.	a. develop an algorithm for solving addition and subtraction problems. b. find sums and differences to ten. c. find the sums and differences of two- and three-digit numbers presented horizontally and vertically. d. estimate sums and differences.
6. recall and recognize facts, definitions, and symbols.	a. determine sums and differences. b. use models, including concrete, to illustrate multiplication and division. c. use "+," "-," "x," and "=" symbols meaningfully. d. recall multiplication facts.
7. read, write, and sequence whole numbers.	a. determine the total number of concrete objects in a given collection. b. determine the total number of objects in two or more sets. c. use **counting on**, **counting up to**, and **counting down from** to solve addition and subtraction problems. d. recognize, write, and use numerals. e. read, write, and use number words. f. determine **one more than** or **one less than** a number. g. determine the order of any set of given numbers.
8. use shape, size, and position to recognize, describe, classify, and compare geometric objects.	a. recognize and name cubes, spheres, cones, cylinders, pyramids, and rectangular solids. b. recognize and name squares, circles, rectangles, and triangles. c. investigate properties of plane and solid figures. d. determine when pairs of figures are congruent. e. determine whether pairs of figures are similar. f. determine lines of symmetry for given shapes. g. copy and make shapes and/or manipulatives such as pattern blocks and tangrams. h. use position terms, such as **inside**, **outside**, etc.
9. estimate and measure, using standard and nonstandard units.	a. tell time to the nearest minute. b. identify days of the week, months, and read a calendar. c. estimate and measure the passage of time (weeks, days, hours, etc.). d. determine the value of coins and bills.

Specific Proficiency Statements	**Sample Indicators**
	e. estimate and determine the cost of more than one item.
	f. determine the amount of change to be received.
	g. develop a concept of measure using nonstandard units.
	h. compare measures using different units.
	i. estimate and measure length.
	j. estimate and measure area through the use of manipulatives and graph paper.
	k. determine (by covering) which of two irregular shapes has the greater area.
10. develop problem-solving strategies.	a. solve nonroutine problems for which specific procedures have not been shown.
	b. solve routine problems for which specific procedures have not been shown.
	c. explain the process used to solve a problem.
	d. use modeling and acting out strategies to solve routine and nonroutine problems.
11. collect, organize, display, and interpret data.	a. interpret information portrayed in a simple bar, circle, line, or picture graph.
	b. organize information and construct a graph.
	c. determine when one event is more likely than another.
12. demonstrate basic skills in using a calculator and computer.	a. use a calculator to solve problems.
	b. use calculators to explore and/or discover mathematical relationships.

MATHEMATICS
UPPER ELEMENTARY LEVEL

Proficiency List 052000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **mathematics** at the upper elementary level, students should	Students will
1. **develop a positive attitude toward mathematics and be able to describe its role and interrelationship with other areas.**	a. communicate mathematical ideas verbally. b. use mathematical concepts in everyday problem-solving situations. c. recognize mathematics as more than computational skill. d. recognize occasions when an estimate is more appropriate than an exact answer.
2. **communicate a functional understanding of the place value system for whole numbers, decimals, and integers.**	a. read and write numbers using numerals and words. b. illustrate a number using a model. c. express a number in various forms. d. tell the value of a digit in a number. e. write a number in expanded notation. f. give examples of the uses of negative numbers. g. compare, order, and graph whole numbers, decimals, and integers. h. round numbers.
3. **use numbers expressed in fractional form.**	a. use manipulatives to compare and order fractions. b. find the common denominator. c. write fractions equivalent to a given fraction. d. order fractions without the use of manipulatives. e. express fractions in simplest form.
4. **compute with whole numbers, decimals, and fractions.**	a. develop nonstandard algorithms for computation. b. acquire proficiency in using algorithms and in dividing with single digit divisors. c. use manipulatives in developing algorithms for fractions and integers.

Specific Proficiency Statements	Sample Indicators
5. demonstrate understanding of ratios, proportions, and percents.	a. write a ratio for a comparison. b. write a proportion expressing equivalent ratios. c. solve a proportion. d. write a percent as a fraction, decimal, and ratio. e. write a fraction, decimal, or ratio as a percent. f. solve story problems involving ratio and percent.
6. demonstrate skills in mental computation and estimation.	a. develop strategies for estimation. b. use estimation to determine the reasonableness of an answer, including calculator answers. c. apply number properties to facilitate mental computation.
7. develop problem-solving strategies for routine, nonroutine, and consumer-related problems through manipulating objects, drawing diagrams, and using appropriate mathematical symbols.	a. solve nonroutine problems for which specific strategies or procedures may not have been shown. b. solve routine problems for which specific strategies or procedures may not have been shown. c. explain the thought processes used in problem solving. d. use strategies such as **diagrams, guess and test, make a list,** and **look for a pattern** in solving routine and nonroutine problems. e. solve consumer problems related to earning and managing money, making purchases, and comparison shopping.
8. demonstrate relationships among numbers, including number sentences with constants and variables (place holders).	a. identify prime and composite numbers. b. list the factors of a number. c. find the LCM (least common multiple) and GCF (greatest common factor) of a set of numbers. d. identify and expand number patterns. e. apply and use formulas/equations to solve problems.
9. recognize, describe, classify, and compare plane and solid geometric shapes.	a. use the geometric terms including **point, line, line segment, ray, parallel lines,** and **perpendicular lines** meaningfully. b. classify angles, triangles, quadrilaterals, and other polygons. c. make constructions in a plane using compass and straightedge. d. construct various polyhedrons including prisms and pyramids. e. investigate properties of plane and solid figures. f. recognize and draw plane and solid figures from different views.

Specific Proficiency Statements	Sample Indicators
	g. recognize figures such as polyominoes that have points and lines of symmetry. h. use computer software, such as LOGO, to explore geometric figures. i. make tessellations (tilings) of the plane using various figures. j. continue investigations of similar and/or congruent figures.
10. select and use appropriate instruments and units for estimating and measuring length, area, volume, capacity, weight, and temperature.	a. estimate and measure length using manipulatives, such as rulers, tape measures, and trundle wheels. b. estimate and find areas and perimeters of regular and irregular shapes. c. compare the areas and perimeters of various regular shapes. d. use manipulatives to find surface area. e. estimate and measure weight using nonstandard and standard units of measurement. f. estimate and measure volume and capacity using non-standard and standard units of measurement. g. estimate and measure temperature using Fahrenheit and Celsius scales. h. estimate and measure angles.
11. collect, organize, represent, interpret, draw conclusions, and predict from data using tables, charts, and graphs.	a. collect and/or organize information and construct bar, line, picture, and circle graphs. b. interpret information portrayed in any graph, table, or chart. c. predict and find the probability of an event experimentally and describe the implications.
12. demonstrate appropriate skills in the use of calculators and computers in problem-solving situations.	a. use a calculator, as needed, to solve problems. b. use calculators to explore and/or discover mathematical relationships. c. write simple programs and use them on the computer to solve mathematics problems. d. use computer software, such as LOGO, to explore mathematical concepts and relationships.

MATHEMATICS
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 053000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **mathematics** at the middle/junior high school level, students should	Students will
1. develop a positive attitude toward mathematics and problem solving.	a. communicate mathematical ideas in oral and written form. b. use mathematical concepts in real-life situations. c. recognize the need for mathematics in order to pursue a variety of career choices. d. recognize mathematical relationships in the arts and sciences. e. recognize problem solving as the focus of higher-order thinking skills in mathematics.
2. reinforce an understanding of the place value system for whole numbers and decimals.	a. read and write whole numbers and decimals. b. tell the value of a digit in a number and the place it holds. c. express whole numbers and decimals in expanded form and in scientific notation. d. round numbers to any place value. e. compare and order a set of whole numbers and decimals.
3. reinforce an understanding of fractions, integers, and irrationals.	a. identify prime and composite numbers. b. find the prime factorization of a natural number and express it in exponential form. c. find the greatest common factor and least common multiple of a set of natural numbers. d. compare and order fractions, integers, and irrationals. e. write fractions in simplest form. f. write fractions as decimals and terminating decimals as fractions. g. show geometrical representation of irrational numbers such as the square roots of 2, 3, or 5.

Specific Proficiency Statements	Sample Indicators
4. develop computational proficiency using the set of real numbers.	a. perform the four fundamental operations on whole numbers, fractions, and decimals. b. compute the sum, product, difference, and quotient of integers. c. use number properties such as "even-ness" and "odd-ness" to predict the sum, difference, product, and quotient of two numbers. d. develop an algorithm to approximate a square root. e. identify and apply the commutative, associative, and distributive properties for rational numbers. f. apply the multiplicative and additive properties of zero and one and additive and multiplicative inverses.
5. develop strategies for solving problems (both routine and non-routine) through translating relevant verbal and physical data into mathematical language.	a. develop appropriate problem-solving strategies, such as **draw a picture or diagram, act it out, write a number sentence, guess and test, work backwards, look for a pattern, break into parts, make a list**, etc. b. explain verbally or in flow chart form the thought processes used in problem solving. c. write a word problem for a given number sentence. d. solve a word problem involving one or more steps.
6. develop estimating skills with whole numbers, fractions, and decimals with application to measurement, geometry, and problem solving.	a. determine the reasonableness of an answer by estimating the result of operations prior to the actual computation. b. recognize that all measures are imprecise and estimate the error involved. c. estimate size, quantity, capacity, and passage of time.
7. develop skills using customary and/or metric units to measure length, area, volume, mass, and temperature.	a. identify and use appropriate units of measurement. b. use ruler and protractor to measure segment length and angle measure consistent with the precision of the measuring instrument. c. make calculations involving measurements using rules for significant digits.
8. collect, organize, analyze, and interpret data through the use of fundamental analysis procedures and communicate appropriate conclusions.	a. interpret and analyze bar, line, picture, and circle graphs. b. choose an appropriate scale for constructing a graph using given information and graph information using two or more different scales.

Specific Proficiency Statements	**Sample Indicators**
	c. construct graphs which represent a given set of numerical data. d. collect, organize, and present a set of numerical data using displays, such as stem-and-leaf and box-and-whisker plots. e. compare bar, line, and picture graphs which provide the same information. f. understand and determine the various measures of central tendency of a set of data (mean, median, mode). g. make a scatter diagram from a set of ordered pairs of data.
9. develop an understanding of geometric terms and concepts and apply those concepts in problem-solving activities.	a. recognize and classify both plane and solid geometric figures and identify their properties. b. find area and perimeter of plane figures and surface area and volume of solids. c. identify and apply the concepts of congruence and similarity. d. complete selected constructions using compass and straightedge or a reflective device. e. identify and analyze the fundamental transformations of translation, reflection, and rotation. f. identify and classify the symmetries of geometric figures. g. apply Pythagorean relationships to problem-solving situations.
10. develop an understanding of the representation of numbers by points on a line or in a plane.	a. locate the points on a number line which correspond to real numbers. b. graph the solution set of a linear equality or inequality on a number line. c. graph ordered pairs of rational numbers on a coordinate plane.
11. develop an understanding of "variable" and an ability to write equations to solve problems involving equalities and inequalities.	a. write algebraic expressions or sentences which represent written or verbally stated conditions. b. analyze verbal problems, translating into mathematical sentences, finding the solution set, and checking. c. solve simple linear equations and inequalities. d. evaluate expressions using the rules for order of operations.

Specific Proficiency Statements	Sample Indicators
12. develop an understanding of the basic concepts of probability and an ability to apply these concepts to making appropriate predictions.	a. construct a sample space by applying counting principles or using techniques such as tree diagrams. b. determine the number of combinations and permutations of a given size from a set of distinct objects. c. calculate or approximate the probability that an event will occur.
13. develop an understanding of ratios, proportions, and percents with applications to problem solving.	a. write and simplify ratios illustrating given situations. b. apply the concept of proportion in solving real-life problems. c. make a scale drawing of a given figure or object. d. find solutions to problems within the environment that involve the concept of percent.
14. develop and reinforce appropriate skills in the use of calculators and computers in problem-solving situations.	a. demonstrate skill in using all the capabilities of a basic four-function calculator with memory. b. use a calculator to explore mathematical concepts and relationships. c. use computer software to explore mathematical concepts and relationships. d. use the computer as a tool for solving problems.

MATHEMATICS PROFICIENCY STATEMENTS
HIGH SCHOOL LEVELS

The high school **mathematics** proficiency statements are given for three levels of study. These are not meant to outline a specific course, or a specific series of courses, but to indicate what three different types of students might need the opportunity to learn.

All people need some knowledge of mathematics to function well in society. Mathematics is the language of science and technology, as well as business and finance. Therefore, all people need some fluency in this language if they are to contribute to and fare well in our contemporary world. This student's needs are addressed in Level I.

Students going to college need mathematical skills beyond the elementary ones. They need a knowledge of computing to deal with the new age of computers and information systems. They need a knowledge of algebra, geometry, and functions to major in many fields, such as archeology or zoology. They need a knowledge of statistics for such fields as business or psychology. The needs of this student are addressed in Level II.

More extensive knowledge and skills, including preparation for calculus, are needed by the college entrant who will take advanced mathematics courses and will major in such fields as engineering or economics. The needs of this student are outlined in Level III.

More than at any time in the past, the knowledge and appreciation of mathematics is essential to students' intellectual development. Young people who avail themselves of the opportunity to gain strong preparation in mathematics and the sciences will grow intellectually and will also keep open the door to a wide range of career choices.

Adapted from statements of The College Board in its series, **Educational Equality Project**.

MATHEMATICS
HIGH SCHOOL - LEVEL I

Proficiency List 054001

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **Level I mathematics** in high school, students should	Students will
1. **demonstrate understanding of the role and value of mathematics as it applies to real life situations.**	a. communicate mathematical ideas verbally. b. use mathematical concepts in everyday problem-solving situations. c. recognize mathematics as more than computational skill. d. recognize occasions when an estimate is better than an exact answer.
2. **use elementary statistical forms including reading, interpreting, organizing, and displaying numeric data in graphs, tables, and charts.**	a. collect numerical data accurately and find the mean, median, mode, and range of the data. b. draw, read, and interpret circle, bar, picture, and line graphs. c. collect, organize, and display data using stem-and-leaf, box-and-whisker plots. d. draw "tree" diagrams and calculate the probabilities of certain events.
3. **use whole numbers, integers, fractions, decimals, and percents in computational work and applications.**	a. compute with whole numbers up to 1,000,000 to find sums, differences, products, and quotients with reasonable speed and accuracy. b. compute with rational numbers in simple fraction form to find sums, differences, products, and quotients with reasonable speed and accuracy (at least to hundredths). c. compute with rational numbers expressed as decimals (at least to hundredths). d. convert common percents to fraction or decimal form and conversely. e. find the missing part when given a percent problem of the form **a % of b = c**, one of which (a,b,c) is missing and use this knowledge to solve word problems involving percent. f. find the prime factorization of composite numbers.

Specific Proficiency Statements	Sample Indicators
4. utilize the full capabilities of a basic calculator and exhibit basic functional proficiency in using a computer.	a. find the exact positive square root of perfect square positive integers up to 1,000 and find the approximate square root of other positive integers less than 1,000 using a table or by computation. b. use exponents to express powers of numbers and perform operations with different powers of the same number. c. use calculators to explore and/or discover mathematical relationships. d. write simple programs and use them on the computer to solve mathematics problems. e. use computer software, such as LOGO, to explore mathematical concepts and relationships.
5. select and use an appropriate formula to solve a problem.	a. select from a list of formulas and use the formula that will aid in finding the solution to a realistic problem. b. solve open sentences (both equations and inequalities) involving first degree polynomials in one variable. c. express relationships in the form of ratios and write and solve problems involving proportions.
6. estimate solutions to numerical problems.	a. develop strategies for estimation. b. use estimation to determine the reasonableness of an answer, including calculator answers. c. apply number properties to facilitate mental computation.
7. identify and classify properties and apply relationships between various geometric figures.	a. identify and construct/draw the basic plane figures, i.e., triangle, various quadrilaterals, other polygons, circles, as well as parallel and perpendicular lines. b. determine lines and points of symmetry in geometric figures and other objects. c. write the definitions of the three basic trigonometric ratios in terms of right triangles and apply this knowledge to the solution of simple problems. d. state and apply the Pythagorean relations to problems involving right triangles. e. calculate the perimeters and areas of plane figures.

Specific Proficiency Statements	**Sample Indicators**
8. utilize concepts of ratio and proportion and find the solution of any linear equation.	a. construct and analyze scale drawings. b. graph the solution set of equations and inequalities in one variable on a number line. c. solve for and check the solution set of a system of two linear equations in two variables.
9. apply mathematical concepts to wages, purchasing, banking and credit, transportation, and other related topics.	a. apply mathematics to solve problems related to taxes (income, sales, property, excise, F.I.C.A.). b. apply mathematics to solve problems related to home improvement projects. c. apply basic formulas to solve problems from business situations (discounts, profit, etc.). d. solve problems about personal finance (checking and savings accounts, budgets, loans, credit buying, etc.).
10. demonstrate skills in using measuring devices in both the customary and metric systems as well as performing resulting calculations.	a. convert any common measurement to an equivalent measurement. b. measure in both customary and metric units and use the results of measurements to calculate other measurements.
11. select and utilize problem-solving strategies in working through a variety of situations involving quantitative data.	a. solve routine and nonroutine problems for which specific strategies or procedures may not have been shown. b. explain the thought processes used in problem solving. c. use strategies such as **diagrams, guess and test, make a list,** and **look for a pattern** in solving routine and nonroutine problems.

MATHEMATICS
HIGH SCHOOL - LEVEL II

Proficiency List 054002

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **Level II mathematics** in high school, students should	Students will
1. apply skills requiring algebraic manipulation to solve equations and inequalities.	a. solve open linear sentences (equalities and inequalities), write and graph solution sets. b. solve a system of two equations by various methods (graphing, substitution, linear combination). c. solve systems of three or more equations. d. solve quadratic equations with real roots by factoring, completing the square, using the quadratic formula, and by graphing.
2. solve a variety of counting problems including permutations and combinations.	a. determine the number of permutations of "n" distinct objects taken "r" at a time. b. determine the number of combinations of "n" distinct objects taken "r" at a time. c. use the fundamental counting principle to determine the number of ways of selecting one item from each of two or more finite sets.
3. apply basic aspects of probability.	a. construct the sample space for a given experiment. b. calculate the probability that a given event in a sample space will occur. c. determine the probability of events (A **or** B) and (A **and** B). d. determine the probability of successive events using conditional probability.
4. use the concepts of descriptive statistics in communicating information about sets of data.	a. interpret data presented in tabular and graphical form. b. organize and present data in tabular or graphical form or using stem-and-leaf and box-and-whisker plots. c. calculate measures of central tendency and measures of dispersion. d. formulate and test hypotheses involving sets of data.

Specific Proficiency Statements	**Sample Indicators**
5. demonstrate critical thinking skills through the use of both inductive and deductive reasoning.	a. distinguish between deductive and inductive reasoning and recognize the usefulness of each. b. prove selected theorems pertaining to algebra. c. prepare or explain proofs of theorems involving coordinate geometry. d. state the converse, inverse, and contrapositive of a theorem and identify equivalent statements.
6. exhibit an understanding of two- and three-dimensional geometric figures.	a. define basic geometric figures, such as line segment, skew lines, parallel lines, ray, angle, triangle, parallelogram, trapezoid, square, rectangle, regular polygon. b. state the meaning of congruence as applied to line segments, angles, triangles, and other geometric figures. c. define similarity for geometric figures and use subsequent properties to solve problems. d. determine symmetries with respect to geometric figures. e. complete proofs by applying properties of parallel and perpendicular lines, triangles, circles, etc.
7. compute and simplify expressions using the complex number system.	a. apply the "order of operations" to a series of indicated arithmetic operations. b. perform the fundamental operations on polynomials and rational expressions. c. state and apply the properties of integer and rational exponents. d. perform the basic operations on the set of irrational numbers expressed as radicals and express irrational numbers in simplest radical form. e. identify the basic field properties of important number sets (integers, rational numbers, real numbers, complex numbers).
8. demonstrate understanding of basic properties and graphs of functions.	a. identify the domain and range of a relation or function. b. write the equation of a line using standard forms: intercept, two-point, etc. c. graph a given quadratic function, find the zeros, locate axis of symmetry, and determine absolute maximum (minimum) values.

Specific Proficiency Statements	**Sample Indicators**
	d. recognize and graph special functions: constant, exponential, logarithmic, trigonometric, absolute value, greatest integer. e. find and graph the inverse of a function and determine whether it is a function. f. use the fundamental laws of logarithms to compute arithmetic expressions and solve logarithmic equations.
9. use both a calculator and computer in appropriate ways to solve mathematical problems.	a. use Cramer's Rule to solve a system of equations. b. determine and graph sets of ordered pairs of relations and functions. c. generate a set of terms given a description of a sequence or series. d. find the inverse of a matrix. e. determine rational approximations of zeros of polynomial functions.
10. demonstrate mathematical skills in a variety of consumer and leisure activities.	a. solve consumer problems involving concepts such as: 1) exponential growth. 2) logarithmic growth. 3) linear relationships. 4) quadratic relationships. 5) ratio and proportion.
11. use geometric concepts, properties, and relationships in appropriate ways.	a. apply the concept of set notation, including subsets and the operations of union and intersection, to geometric figures. b. determine the measures of line segments, angles and arcs in circles intersected by chords, diameters, secants, and tangents. c. find areas and perimeters of triangles, trapezoids, parallelograms, rectangles, squares, circles, regular hexagons and octagons, and geometric figures which are a composition of more than one figure. d. find the surface area of spheres and the total and lateral areas of cones, cylinders, prisms, and pyramids. e. find volumes of spheres, cones, cylinders, prisms, and pyramids. f. use the Phythagorean Theorem in problem-solving applications.

Specific Proficiency Statements	**Sample Indicators**
12. define problem-solving strategies, seek multiple solutions, and develop generalizations of solutions.	a. develop appropriate problem-solving strategies, such as **draw a picture or diagram, act it out, write a number sentence, guess and test, work backwards, look for a pattern, break into parts, make a list.** b. analyze verbal problems, translate into mathematical sentences, find the solution set, and check. c. write a word problem for a given number sentence.
13. appreciate the use of mathematics as the quantitative language of the arts and sciences.	

MATHEMATICS
HIGH SCHOOL - LEVEL III

Proficiency List 054003

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **Level III mathematics** in high school, students should	Students will
1. **demonstrate a thorough understanding of the concept of function and its related properties.**	a. identify properties of functions from their equations. b. write the inverse of a function and determine whether it is also a function. c. determine the composite of two functions. d. apply the knowledge of functions to solve problems.
2. **exhibit a knowledge and understanding of the properties, graphs, and relationships of algebraic, exponential, logarithmic, and trigonometric functions.**	a. sketch the graph from a knowledge of the equation of a function. b. associate equations of functions with their graphs. c. sketch the graph of a composite function.
3. **demonstrate an understanding of selected topics of discrete mathematics.**	a. use elementary concepts of probability to interpret statistical results. b. use simulation techniques to model experimental situations. c. use laws of logic, including indirect reasoning, to determine validity of a conclusion.
4. **exhibit an understanding of geometric concepts, properties, and relationships and use in applicable problems.**	a. use a knowledge of two- and three-dimensional figures and their properties to solve problems. b. demonstrate familiarity with vectors and polar coordinates. c. apply methods of analytic geometry to solve problems and complete proofs.
5. **develop an understanding of the properties and concepts of sequences and series.**	a. use recursive formulas to determine elements of a sequence. b. identify arithmetic and geometric sequences. c. complete proofs by mathematical induction.

Specific Proficiency Statements	Sample Indicators
6. demonstrate effective communication and cooperation skills in group problem-solving activities.	a. interpret, in nonmathematical language, the relationships presented in mathematical form. b. formulate and solve a problem stated non-mathematically in mathematical terms.
7. exhibit skill and understanding of computation and simplification within the real and complex number systems.	a. simplify expressions involving roots and exponents. b. complete operations with complex numbers.
8. demonstrate skill in the use of a full "scientific" calculator, as well as a computer, in solving appropriate problems.	a. use mental computation and estimation to evaluate calculator and computer output. b. devise algorithms to solve problems using calculators or computers. c. use prepared computer programs effectively.
9. use inductive and deductive reasoning to arrive at possible conclusions regarding situations involving quantitative data.	a. recognize characteristics and applications of binomial, normal, and Poisson distributions. b. recognize situations where inductive reasoning is appropriate.
10. identify and select problem-solving strategies, seek multiple solutions, and develop generalizations of solutions.	a. apply the ability to solve equations and inequalities to the solution of real problems. b. use properties of direct and inverse variation to solve problems.
11. communicate an appreciation for the structure of mathematics as the language of the arts and sciences as well as the potential behind the mathematical question, "What if...?"	a. use mathematical relationships to describe results obtained by observation and experimentation.

Specific Proficiency Statements	Sample Indicators
12. demonstrate a knowledge and understanding of the limit and continuity of a function.*	a. calculate limits for continuous and discontinuous functions. b. investigate functions for existence of limits.
13. differentiate and integrate polynomial as well as appropriate algebraic and transcendental functions and apply the procedure to the solution of applicable problems.*	

* AP Level

APPENDICES

Preface

A. An Agenda for Action
B. Professional Development Programs for Teachers of Mathematics
C. Calculators in the Math Classroom
D. Provisions for Mathematically Talented and Gifted
E. Research in Math Education
F. Selected References

PREFACE

One of the goals of the National Council of Teachers of Mathematics during the last half of the 1970's was the development of recommendations for the mathematics curriculum of the 1980's. The Board of Directors of the Council gave top priority to providing a leadership role in effecting change, and the result of this effort was the "Agenda for Action: Recommendations for School Mathematics of the 1980's" which is reprinted in Appendix A.

The Agenda has been the subject of many discussions, articles in professional journals, and sessions at local, regional, and national meetings of mathematics educators. Implementation of the curriculum implied in these recommendations, however, has been occurring slowly. There is still much to be accomplished during the last few years of the 1980's and on into the 1990's. The Agenda can guide our thinking as we prepare students for the twenty-first century.

The following material is used with the permission of the National Council of Teachers of Mathematics. The views expressed or implied in these supplementary materials should not be interpreted as official positions of the Indiana Department of Education. They are intended to provide information on mathematics issues for discussion by local curriculum development groups.

An Agenda for Action

Recommendations for School Mathematics of the 1980s

The National Council of Teachers of Mathematics recommends that—

1. problem solving be the focus of school mathematics in the 1980s;
2. basic skills in mathematics be defined to encompass more than computational facility;
3. mathematics programs take full advantage of the power of calculators and computers at all grade levels;
4. stringent standards of both effectiveness and efficiency be applied to the teaching of mathematics;
5. the success of mathematics programs and student learning be evaluated by a wider range of measures than conventional testing;
6. more mathematics study be required for all students and a flexible curriculum with a greater range of options be designed to accommodate the diverse needs of the student population;
7. mathematics teachers demand of themselves and their colleagues a high level of professionalism;
8. public support for mathematics instruction be raised to a level commensurate with the importance of mathematical understanding to individuals and society.

APPENDIX A - AN AGENDA FOR ACTION RECOMMENDATIONS

Recommendation 1: Problem solving must be the focus of school mathematics in the 1980s.

The development of problem-solving ability should direct the efforts of mathematics educators through the next decade. Performance in problem solving will measure the effectiveness of our personal and national possession of mathematical competence.

Problem solving encompasses a multitude of routine and commonplace as well as nonroutine functions considered to be essential to the day-to-day living of every citizen. But it must also prepare individuals to deal with the special problems they will face in their individual careers.

Problem solving involves applying mathematics to the real world, serving the theory and practice of current and emerging sciences, and resolving issues that extend the frontiers of the mathematical sciences themselves.

This recommendation should not be interpreted to mean that the mathematics to be taught is solely a function of the particular mathematics needed at a given time to solve a given problem. Structural unity and the interrelationships of the whole should not be sacrificed.

True problem-solving power requires a wide repertoire of knowledge, not only of particular skills and concepts but also of the relationships among them and the fundamental principles that unify them. Each problem cannot be treated as an isolated example. This recommendation looks toward the need to solve problems in an uncertain future as well as here and now. As such, mathematics needs to be taught as mathematics, not as an adjunct to its fields of application. This demands a continuing attention to its internal cohesiveness and organizing principles as well as to its users.

Recommended Actions

1.1 The mathematics curriculum should be organized around problem solving.

- The current organization of the curriculum emphasizes component computational skills apart from their application. These skills are necessary tools but should not determine the scope and sequence of the curriculum. The need of the student to deal with the personal, professional, and daily experiences of life requires a curriculum that emphasizes the selection and use of these skills in unexpected, unplanned settings.

- Mathematics programs of the 1980s must be designed to equip students with the mathematical methods that support the full range of problem solving, including

  - the traditional concepts and techniques of computation and applications of mathematics to solve real-world problems, the rational and real number systems, the notion of function, the use of mathematical symbolism to describe real-world relationships, the use of deductive and inductive reasoning to draw conclusions about such relationships, and the geometrical notions so useful in representing them.
  - methods of gathering, organizing, and interpreting information, drawing and testing inferences from data, and communicating results;
  - the use of the problem-solving capacities of computers to extend traditional problem-solving approaches and to implement new strategies of interaction and simulation;
  - the use of imagery, visualization, and spatial concepts.

- Mathematics programs should give students experience in the application of mathematics, in selecting and matching strategies to the situation at hand. Students must learn to

  - formulate key questions;
  - analyze and conceptualize problems;
  - define the problem and the goal;
  - discover patterns and similarities;
  - seek out appropriate data;
  - experiment;
  - transfer skills and strategies to new situations;
  - draw on background knowledge to apply mathematics.

- Fundamental to the development of problem-solving ability is an open mind, an attitude of curiosity and exploration, the willingness to probe, to try, to make intelligent guesses.

- The curriculum should maintain a balance between attention to the applications of mathematics and to fundamental concepts.

1.2 The definition and language of problem solving in mathematics should be developed and expanded to include a broad range of strategies, processes, and modes of presentation that encompass the full potential of mathematical applications.

- Computational activities in isolation from a context of application should not be labeled "problem solving."
- The definition of problem solving should not be limited to the conventional "word problem" mode.
- As new technology makes it possible, problems should be presented in more natural settings or in simulations of realistic conditions.

- Educators should give priority to the identification and analysis of specific problem-solving strategies.
- Educators should develop and disseminate examples of "good problems" and strategies that suggest the scope of problem-solving activities for each school level.

1.3 Mathematics teachers should create classroom environments in which problem solving can flourish.

- Students should be encouraged to question, experiment, estimate, explore, and suggest explanations. Problem solving, which is essentially a creative activity, cannot be built exclusively on routines, recipes, and formulas.
- The mathematics teacher should assist the student to read and understand problems presented in written form, to hear and understand problems presented orally, and to communicate about problems in a variety of modes and media.
- The mathematics curriculum should provide opportunities for the student to confront problem situations in a greater variety of forms than the traditional verbal formats alone; for example, presentation through activities, graphic models, observation of phenomena, schematic diagrams, simulation of realistic situations, and interaction with computer programs.

1.4 Appropriate curricular materials to teach problem solving should be developed for all grade levels.

- Most current materials strongly emphasize an algorithmic approach to the learning of mathematics, and as such they are inadequate to support or implement fully a problem-solving approach. Present textbook problems tend to be easily categorized and stylized and often bear little resemblance to highly diversified, real-life problems. They do not permit the full range of strategies and abilities actually demanded in realistic problem contexts.
- The potential of computing technology for increasing problem-solving ability should be explored and exploited by the development of creative and imaginative software.

1.5 Mathematics programs of the 1980s should involve students in problem solving by presenting applications at all grade levels.

- Applications should be presented that use the student's growing and changing repertoire of basic skills to solve a multitude of routine and commonplace problems essential to the day-to-day living of every citizen.
- Applications of mathematics to other disciplines such as the social sciences, businesses, engineering, and the natural sciences should be presented.
- The enormous versatility of mathematics should be illustrated by presenting as diversified a collection as possible at the given grade level.

- At the college level, courses in mathematics and the mathematical sciences should give prospective teachers experiences that develop their capacities in modeling and problem solving.

1.6 Researchers and funding agencies should give priority in the 1980s to investigations into the nature of problem solving and to effective ways to develop problem solvers.

- Support should be provided for

  - the analysis of effective strategies;
  - the identification of effective techniques for teaching;
  - new programs aimed at preparing teachers for teaching problem-solving skills;
  - investigations of attitudes related to problem-solving skills;
  - the development of good prototype material for teaching the skills of problem solving, using all media.

Recommendation 2: The concept of basic skills in mathematics must encompass more than computational facility.

There must be an acceptance of the full spectrum of basic skills and recognition that there is a wide variety of such skills beyond the mere computational if we are to design a basic skills component of the curriculum that enhances rather than undermines education.

We recognize as valid and genuine the concern expressed by many segments of society that basic skills be a part of the education of every child. However, the full scope of what is basic must include those things that are essential to meaningful and productive citizenship, both immediate and future.

The agreement among parents, educators, and mathematicians on the need for teaching basic skills with greater effectiveness unfortunately does not yet extend to a common understanding and acceptance of exactly what these basic skills should comprise.

Some groups narrowly limit them to routine computation at the expense of understanding, applications, and problem solving. This would leave little hope of developing the functionally **competent** student that all desire.

It must also be recognized that individual capacities, interests, and future directions might call for different emphases and different selections in matching basic skills to individual needs.

The time and energy that teachers and programs should be devoting to building beyond minimal foundations are sometimes skirted, being considered risky deviations from the minimal targets on which educators believe they will be judged. There is great pressure today to use all such time, energy, and resources on overkill in the minimal target areas even though little added productivity may be achieved.

Rather than fostering a return to some acceptable common threshold of performance, the back-to-basics movement tends to place a low ceiling on mathematical competence - and this at the onset of an era in which daily life will be more deeply permeated by multiple and diverse uses of mathematics than ever before. Under these circumstances, even if improvement in rote computation takes place, a citizen who cannot analyze real-life situations to the point of recognizing what computations must be made to solve real-life problems has not entered the mainstream of functional citizenship.

It is dangerous to assume that skills from one era will suffice for another. Skills are tools. Their importance rests in the needs of the times. Skills once considered essential become obsolete, and this is likely to increase in pace and scope as advances in technology revolutionize our individual, social, and economic lives. Necessary new skills arise from the dimensions of the mathematics pertinent to an age of population explosion, space exploration, economic and fiscal complexity, and microelectronic wonders. Time and space for including these new skills in the curriculum must be purchased by eliminating the obsolete.

Insisting that students become highly facile in paper-and-pencil computations such as 3841 x 937 or 72,509 ÷ 29.3 is time-consuming and costly. For most students, much of a full year of instruction in mathematics is spent on the division of whole numbers - a massive investment with increasingly limited productive return. A small fraction of that time is spent on the skills of problem analysis and interpretation, which enable students to identify and set up the computations needed. For most complex problems, using the calculator for rapid and accurate computation makes a far greater contribution to functional competence in daily life.

Common sense should dictate a reasonable balance among mental facility with simple basic computations, paper-and-pencil algorithms for simple problems done easily and rapidly, and the use of a calculator for more complex problems or those where problem analysis is the goal and cumbersome calculating is a limiting distraction.

Reasonable standards of time-effectiveness and cost-effectiveness should be applied to the use of instructional time, where the criterion is the productive applicability of the learned technique to real-life problems.

Professional knowledge of future trends, industrial, financial, engineering, and scientific need, and the demands of daily life are all better arbiters of what is currently essential and what has become obsolete than our nostalgia as parents or teachers.

Recommended Actions

2.1 The full scope of what is basic should contain at least the ten basic skill areas identified by the National Council of Supervisors of Mathematic's "Position Paper on Basic Skills." These areas are problem solving; applying mathematics in everyday situations; alertness to the reasonableness of results; estimation and approximation; appropriate computational skills; geometry; measurement; reading, interpreting and constructing tables, charts, and graphs; using mathematics to predict; and computer literary.

2.2 The identification of basic skills in mathematics is a dynamic process and should be continually updated to reflect new and changing needs.

2.3 Changes in the priorities and emphases in the instructional program should be made in order to reflect the expanded concept of basic skills.

- There should be increased emphasis on such activities as
  - locating and processing quantitative information;
  - collecting data;
  - organizing and presenting data;
  - interpreting data;
  - drawing inferences and predicting from data;
  - estimating measures;
  - measuring using appropriate tools;
  - mentally estimating results of calculations;
  - calculating with numbers rounded to one or two digits;
  - using technological aids to calculate;
  - using ratio and proportion to deal with rate problems in general and with percent problems in particular;
  - using imagery, maps, sketches, and diagrams as aids to visualizing and conceptualizing a problem;
  - using concrete representations and puzzles that aid in improving the perception of spatial relationships.
- There should be decreased emphasis on such activities as
  - isolated drill with numbers apart from problem contexts;
  - performing paper-and-pencil calculations with numbers of more than two digits;
  - mastering highly specialized vocabulary not useful later either in mathematics or in daily living;

- converting measures given in one system to corresponding measures in another system;
- working with tables whose usefulness as aids to calculation has been supplanted by calculators and other technological aids (e.g., numerical computations with logarithms and cologs).

2.4 Teachers should incorporate estimation activities into all areas of the program on a regular and sustaining basis, in particular encouraging the use of estimating skills to pose and select alternatives and to assess what a reasonable answer may be.

2.5 Teachers should provide ample opportunities for students to learn communication skills in mathematics. They should systematically guide students to read mathematics and to talk about it with clarity.

2.6 The higher-order mental processes of logical reasoning, information processing, and decision making should be considered basic to the application of mathematics. Mathematics curricula and teachers should set as objectives the development of logical processes, concepts, and language, including

- the identification of likenesses and differences leading to classification;
- understanding, making, and applying definitions;
- the development of a feeling for informal proof including counter-examples and generalizations;
- precise use of such language as **at least, at most, either-or, both-and,** and **if-then**.

Recommendation 3: Mathematics programs must take full advantage of the power of calculators and computers at all grade levels.

Beyond an acquaintance with the role of computers and calculators in society, most students must obtain a working knowledge of how to use them, including the ways in which one communicates with each and commands their services in problem solving.

The availability of computing aids, including computers and calculators, requires a reexamination of the computational skills needed by every citizen. Some of these computational skills will no longer retain their same importance, whereas others will become more important.

It is recognized that a significant portion of instruction in the early grades must be devoted to the direct acquisition of number concepts and skills without the use of calculators. However, when the burden of lengthy computations outweighs the educational contribution of the process, the calculator should become readily available.

With the increasing availability of microcomputers at decreasing costs, it is imperative that schools play an active part in preparing students of the 1980s to live in a world in which more and more functions are being performed by computers.

Recommended Actions

3.1 All students should have access to calculators and increasingly to computers throughout their school mathematics program.

- Schools should provide calculators and computers for use in elementary and secondary school classrooms.
- Schools should provide budgets sufficient for calculator and computer maintenance and replacement costs.

3.2 The use of electronic tools such as calculators and computers should be integrated into the core mathematics curriculum.

- Calculators should be available for appropriate use in all mathematics classrooms, and instructional objectives should include the ability to determine sensible and appropriate uses.
- Calculators and computers should be used in imaginative ways for exploring, discovering, and developing mathematical concepts and not merely for checking computational values or for drill and practice.
- Teachers should ensure in their classroom management that the use of computers by individual students in isolated activity does not replace the critical classroom interaction of students with peers and teacher. The healthy give-and-take of group work and discussion, which promotes values of communication, cooperation, empathy, mutual respect, and much of cognitive development, remains essential.

3.3 Curriculum materials that integrate and require the use of the calculator and computer in diverse and imaginative ways should be developed and made available.

- Schools should insist that materials truly take full advantage of the immense and vastly diverse potential of the new media. In particular, developers of software should be cautioned that just to use conventional material and techniques newly translated to the medium of the computer will not suffice.
- Educators should take care to choose software that fits the goals or objectives of the program and will not twist the goals and developmental sequence to fit the technology and available software.

3.4 A computer literacy course, familiarizing the student with the role and impact of the computer, should be a part of the general education of every student.

- In cooperation with schools and professional teacher organizations, funding agencies should support the development of courses in computer literacy for both junior and senior high school levels.

3.5 All mathematics teachers should acquire computer literacy either through preservice programs or through inservice programs funded by school districts in order to deal with the impact of computers on their own lives and to keep pace with the inevitable sophistication their students will achieve.

- Colleges should provide courses for both preservice and inservice education in computer literacy, programming, and instructional use of calculators and computers.
- Professional organizations should provide information through their various media, conferences, workshops, and seminars to aid in the inservice education of teachers in uses of the calculator and computer.

3.6 Secondary school computer courses should be designed to provide the necessary background for advanced work in computer science.

- Curriculum design should provide the required foundation for those students who will be involved in careers that increasingly demand advanced computing skills and applications of computing and for those students who will go on to deeper study in frontier fields of computer development.

3.7 School administrators and teachers should initiate interaction with the home to achieve maximum benefit to the student from the coordinated home and school use of computers and calculators.

- Criteria should be developed to assist parents and school personnel in their selection of home/school computing hardware.
- Professional organizations of teachers, mathematicians, and computer scientists should develop guidelines to aid schools, teachers, and parents in the selection of educational software.
- The uses of technological devices such as calculators, computers, video disks, and electronic games in the home and other out-of-school places should be anticipated. Programs should be planned that will encourage the positive and educationally beneficial use of these devices.
- As home computers come into wider use, homework should be assigned that can take advantage of their potential in problem solving.

3.8 Educational users of electronic technology should demand a dual responsibility from manufacturers: the development of good software to promote the problem-solving abilities of the student and, eventually, the standardization and compatibility of hardware.

3.9 Provisions should be made by educational institutions and agencies to help in the necessary task of educating society's adults in computer literacy and programming.

3.10 Teachers of other school subjects in which mathematics is applied should make appropriate use of calculators and computers in their instructional programs.

3.11 Teacher education programs for all levels of mathematics should include computer literacy, experience with computer programming, and the study of ways to make the most effective use of computers and calculators in instruction.

3.12 Certification standards should include preparation in computer literacy and the instructional uses of calculators and computers.

Recommendation 4: Stringent standards of both effectiveness and efficiency must be applied to the teaching of mathematics.

What is learned relative to a topic, how long it is retained, how readily it is applied - all these depend on the learning process the students pass through and how effectively they are engaged in that process. It is fruitless to consider topics taught apart from the way learners meet these topics.

Instructional time is a precious commodity. It must be spent wisely. Learning is a product of both the time engaged in a learning task and the quality of the engagement. Teachers must employ the most effective and efficient techniques at their command. They must apportion instructional time according to the importance of the topic, recognizing that the value of a skill or knowledge is subject to change over time.

Modern technology and educational theory and research have made accessible to today's teacher approaches, materials, and strategies that were not previously available. Teachers at all levels must learn to use this enriched variety of instructional techniques, materials, and resources to teach mathematics more effectively.

Recommended Actions

4.1 The major emphasis on problem solving in the curriculum must be accommodated by a reprogramming of the use of time in the classroom.

- Priority in classroom time should be devoted to involving students in meaningful problem-solving activities. Explanation, practice and directive teaching are important but should not diminish the time necessary to achieve this priority. Requiring complete mastery of skills before allowing participation in challenging problem solving is counterproductive.
- The time spent on mathematics in elementary school programs should be increased. Higher-order skills in problem solving require more time to learn than the lower-order, narrowly mechanistic skills.
- The extent of teacher and student time devoted to certain traditional skill areas should be reduced to make room for newly emerging objectives.
- There are certain algorithmic skills (e.g. long division with multiple-digit divisors) that require a great expenditure of classroom time. A strict standard of time-effectiveness and cost-effectiveness should be applied to determine whether actual use of that technique in life outside school justifies this much expenditure of effort and time. The use of calculators has radically reduced the demand for some paper-and-pencil techniques.
- Teachers should learn effective techniques of classroom management to assess and achieve the optimal time on a task.

4.2 School administrators and parents must support the teacher's efforts to engage students more effectively in learning tasks.

- Local administrators should ensure uninterrupted time for the teacher to carry out the instructional program.
- Parents and administrators must support the authority of the teacher to require that students be productively engaged in learning during their class time. They should exercise reasonable sanctions against students who do not respect that authority.
- Parents and administrators should expect that teachers will assign a reasonable amount of meaningful homework to extend productively the time students are engaged in the study of mathematics. Both should use their influence to increase the likelihood that students will complete the homework as assigned.
- School budgets should provide for a range of instructional resources adequate to support a wide variety of teaching strategies.

4.3 Teachers should use diverse instructional strategies, materials, and resources, such as

- individual or small-group work as well as large-group work;
- well-planned use of media, such as overhead projectors, videotapes, video disks, audio/video cassettes, computers, films, slides, television;
- the provision of situations that provide discovery and inquiry as well as basic drill;
- the use of manipulatives, where suited, to illustrate or develop a concept or skill;
- the inclusion of cyclic review of past topics (contents, skills, and ideas previously taught);
- the use of materials and references outside the classroom, such as visiting museums, using the library, visiting businesses or industries, visiting computer centers, making home television assignments.

4.4 School districts, local and state or provincial officials, manufacturers, and publishers should take a bolder and more imaginative approach to selecting and producing educational hardware and software in order to provide for a curriculum that emphasizes problem solving.

- Unnecessarily restrictive conditions set by school districts, state and provincial agencies, outdated ground rules of publishing houses, conservative status quo editorial policies, and the like should give way to greater openness and willingness to address future needs.

Recommendation 5: The success of mathematics programs and student learning must be evaluated by a wider range of measures than conventional testing.

The first purpose of meaningful evaluation in school mathematics should be the improvement of learning programs, teaching, and materials. Educators must evaluate to have information for sound decisions, to be accountable to their public, and to know how well they are doing. Evaluation is a part of mathematics teaching, and hence mathematics educators should be centrally involved in the evaluation process.

Evaluation is not limited to testing. It includes gathering data and interpreting the data. Testing is one source of data. There are many others. Today, many people use test scores as the sole index of the quality of mathematics programs or of the success of student achievement. Test scores alone should not be considered synonymous with achievement or program quality. A serious danger to the education of our youth is the increasing tendency on the part of the public to assume that the sole objective of schooling is a high test score. This is often assumed without the critical knowledge of what is being tested or whether test items fit desired goals.

APPENDIX A - AN AGENDA FOR ACTION

The evaluation of problem-solving performance will demand new approaches to measuring. Certainly present tests are not adequate. In particular, the measuring of the use of problem-solving processes will demand innovative techniques. Evaluation of programs with problem-solving goals must be sensitive to the nature of those goals. It is imperative that the goals of the mathematics program dictate the nature of the evaluations needed to assess program effectiveness, student learning, teacher performance, or the quality of materials. Too often the reverse is true: the tests dictate the programs, or assumptions of the evaluation plan are inconsistent with the program's goals.

Recommended Actions

5.1 The evaluation of mathematics learning should include the full range of the program's goals, including skills, problem solving, and problem-solving processes.

- The evaluation of the use of problem-solving processes must be given special attention by schools, teachers, researchers, test developers, and teacher educators.
- Assessment programs, such as the National Assessment and some state assessments, should continue to sample a wide variety of mathematics learning outcomes and should consider future as well as present needs and programs.
- The development of problem-solving skills should be assessed for each student over the entire K-12 school mathematics program.
- Minimal competencies should not be construed as an adequate measure of an individual's mathematic achievement. What is minimal for all is optimal for none.

5.2 Parents should be regularly and adequately informed and involved in the evaluation process.

- With mutual respect (the educator for the sincere concern and valid input of the parent and the parent for the professional expertise of the educator), school administrators, teachers, and parents should cooperate in determining educational goals and the appropriate plan for evaluation.
- Nontest evaluation methods and strategies should be discussed with parents, students, and the general public.

5.3 Teachers should become knowledgeable about, and proficient in, the use of a wide variety of evaluation techniques.

- Preservice and inservice teacher education should provide mathematics teachers with knowledge about, and skill in, evaluation.

- Evaluation strategies that include both test and nontest techniques should be developed and disseminated to mathematics teachers both in their initial preparatory program and in continual inservice updating.
- Teachers should improve their diagnostic skills and their ability to structure appropriate remediation.
- Student strengths and weaknesses should be assessed on a regular basis, using a variety of measures and techniques.
- The informed judgment of teachers should be considered a vital part of the evaluation of any student.
- Teachers should be prepared in the development and use of teacher-made tests.

5.4 The evaluation of mathematics programs should be based on the program's goals, using evaluation strategies consistent with these goals.

- Standardized tests should be used in program evaluations only when it can be clearly demonstrated that the test matches the goals of the program.
- The results of a test designed for purposes other than program evaluation (such as the SAT) should not be interpreted as an evaluation of mathematics programs.
- Available evaluation and testing techniques should not determine the goals and objectives of the mathematics program or the emphases of classroom instructional effort.
- Test designers should give attention to the need for more options in format than the conventional multiple-choice format. An emphasis on problem solving demands more flexibility and creativity in assessment than is possible within the restrictions of most current test formats.
- Where minimal competency tests are mandated, they should be implemented with extreme caution to assure that adverse effects on the program do not result.
- Task forces involving parents, teachers, and students should be created to monitor the effects of minimal competency programs.
- Mathematics educators should be centrally involved in the development of competency or assessment programs at local, state, and provincial levels and in the monitoring of the effects of competency testing on mathematics learning.
- Longitudinal evaluation of individual problem-solving ability should be developed. The acquisition of problem-solving skills is a long-term process and should not be evaluated solely with short-term measures.
- Test scores should not be used as the sole index of success in mathematics programs.
- Accreditation of school mathematics programs should use criteria specific to the quality of the mathematics programs rather than to conditions peripheral to content and instructional goals.

5.5 The evaluation of materials for mathematics teaching should be an essential aspect of program planning.

- Textbook materials should be judged and selected in terms of the program's goals rather than vice versa.
- Instructional materials with sexist and ethnic biases should not be selected.
- The selection of tests should involve a careful review by teachers as well as administrators.
- Strategies for evaluating nonprint materials must be developed and used.

5.6 Mathematics teachers must undergo continuing evaluation as a necessary component in improving mathematics programs.

- Teachers should maintain an awareness of the need and the strategies for self-evaluation.
- A variety of supportive evaluation strategies, such as peer observation, supervisor observation, and videotaping, should be made available to the teacher.
- Any evaluation of mathematics teaching should be sensitive to the instructional goals and should be unique to the content, the teacher, and the class.
- If an evaluation of a teacher's effectiveness includes student performance, the measures of student performance should be consistent with instructional goals. Such evaluation should also consider that there are external factors affecting student performance that are not amenable to teacher influence.
- Judgments of teacher competency are necessary but should be made with caution, with the realization that the validity of most existing measures rests on a shaky foundation.
- Teachers and teacher educators should be centrally involved in the development of instruments for the evaluation of teaching effectiveness.

5.7 Funding agencies should support research and evaluation of the effects of a problem-solving emphasis in the mathematics curriculum.

- The nature of problem-solving ability suggests that longitudinal studies will be most meaningful. The more typical short-term project may force a hasty and superficial treatment of programs whose objectives must be complex, interrelated, and of a long-lasting character.

Recommendation 6: More mathematics study must be required for all students and a flexible curriculum with a greater range of options should be designed to accommodate the diverse needs of the student population.

Mathematics is pervasive in today's world. Mathematical competence is vital to every individual's meaningful and productive life. It is, moreover, a valuable societal resource, and the potential of our educated citizenry to make significant use of mathematics is not being fully met. The amount of time the majority of students spend on the study of mathematics in school in no way matches the importance of mathematical understanding to their lives, now and in the future.

Polls show that the public recognizes that mathematics is an essential subject for all students. Yet it is typical to find that only one year of mathematics is required for students in grades 9-12. Surveys of instructional time indicate that only a small percentage of time in elementary school is devoted to mathematics. And only a very tiny portion of that time is spent on teaching children to apply mathematics and solve problems.

When a student discontinues the study of mathematics early in high school, he or she is foreclosing on many options. Many doors, both in college programs and in vocational training, are at once closed to that person. These facts should be communicated more effectively to both the students and their parents.

The recommendation for increasing mathematics study imposes a special responsibility on professional leadership in mathematics education and the schools. To say that most students should study more mathematics is not to say that it should be the same mathematics for all. It does not mean simply keeping all students longer in the same traditional track. In fact, such a recommendation poses a tremendous challenge to curriculum developers and school districts to devise a more flexible range of options, a diversified program to meet a variety of interests, abilities, and goals.

Except for a distinction among courses typically taken in the ninth grade, differentiation in students' mathematics programs has been based mainly on whether or not a student takes elective years of mathematics. If everyone now needs more mathematics study, then differentiation must occur within the program.

The growing diversification of the applications of mathematics in an ever-increasing variety of college programs of study demands more than a single college-preparatory program. At the college level, the trend is to broaden the conception of mathematical study to include what is called "the mathematical sciences." Roughly, this means not only mathematics but the delivery of mathematical ideas and tools to the solution of real-life problems. Present high school programs do not fully anticipate the many options provided by mathematics, the mathematical sciences, and computer science.

Technical and vocational training at different levels also assumes more and diverse mathematical backgrounds. For those whose formal education will end with high school, the needs of citizen and consumer for increasing mathematical sophistication dictate a collection of courses based on consumer and career needs, computer literacy, and quantitative literacy.

It is important that recommended programs permit lateral movement and not strictly "track" students, trapping them in a linear pattern that does not permit change to another path. Flexibility is vital, and the key is to keep options open as long as possible.

Since a higher level of mathematical skill and understanding will increasingly become a significant advantage in nearly all lives, then justice demands that all groups have equal access to these advantages. At present, females and some minority groups are underrepresented in mathematics courses and courses for which mathematics is prerequisite.

It is naive to suppose that just providing mathematics courses as electives will serve for equality of opportunity. All reasonable means should be employed to assure that everyone will have the foundation of mathematical learning essential to fulfilling his or her potential as a productive citizen. The currently underrepresented groups should be especially encouraged and helped.

Recognizing diversified individual interests and needs entails devising programs that are tailored for particular categories of students. Differentiated curricula must incorporate the special needs in mathematics of students with handicaps, including physical or learning difficulties. These programs will need to move away from the idea that everyone must learn the same mathematics and develop the same skills. Mathematics and mathematical ability cover a much broader range than most people realize.

In many current programs, the student who does poorly in the algorithmic skills finds progress in all aspects of mathematical development halted, since remediation is designed to concentrate solely on this deficiency. Remedial programs should identify other areas of mathematical ability - for example, spatially related skills - and concentrate attention also on the students' strengths, not solely on their deficits.

The student most neglected, in terms of realizing full potential, is the gifted student of mathematics. Outstanding mathematical ability is a precious societal resource, sorely needed to maintain leadership in a technological world.

Mathematics educators and curriculum developers should redesign the sequence of the curriculum to realize the critical process goals of problem solving, as well as content and skill goals. A clear and logical developmental sequence for process objectives from kindergarten through twelfth grade should be described and serve as an organizing framework.

In very general terms, such a sequence should proceed through stages of development, though in practice, progression should be smooth and unbroken. In the elementary school, children, in their experiences in solving particular problems, gradually develop their higher-order mental abilities and learn particular skills and particular strategies. At this stage, strategies are primarily specific to individual problems. A foundation of skills must be laid, but skills should not be learned entirely in isolation from application even in the primary grades. There should be an interplay of skill building and application throughout.

Moving through the upper grades and into the junior high school level, the progress should be toward more generalization, more abstraction of techniques, more emphasis on similarities and patterns found in differing contexts. Strategies become not just ways to solve one type of problem but generalized and synthesized. Techniques learned in one context may be recognized as applicable to other problems. Specific attention is needed to help students make the important transition to the abstract reasoning processes.

During the seventh and eighth grades, intensive focus on problem solving should become a vehicle to exercise, confirm, and develop further all basic skills. At the same time, familiarity, competence, and confidence should be built in applying these mathematical skills to solving problems of varying difficulty and from diverse settings. At this stage, a significant skill is the ability to select strategies from a growing repertoire.

A broad range of problem-solving approaches should be explored so that the teacher can identify students' special strengths and advise them on high school options.

The ability to create strategies to attack a new problem is, at the junior high school level, simple and embryonic. It should increase in sophistication throughout high school. More flexibility and power should be achieved by more generalization and abstraction. The essential nature of techniques and strategies and their range of applicability should be emphasized as students begin to see more applications to broad categories of problem areas, as in, for example, application to other disciplines. There should be a greater effort made to coordinate the mathematics learned in mathematics classes with other subjects that use mathematics. Students who perform well in mathematics classes often fail to see any relationship in what they are doing there to the mathematical techniques employed in classes in science and other subjects.

This does not suggest that the content of high school mathematics is either dictated by or limited to the range of mathematical techniques used in other subjects. The goal is to develop a more flexible, deeper, and broader problem-solving power, and this goes significantly beyond the formulas and recipes that have been traditionally applied to familiar problems.

At the same time, the important interplay and integration of mathematics and its applications in learning should not cease because isolated course structure separates mathematics from disciplines that apply it. The principles of learning must take priority over administrative convenience. It is likely that this coordination will have to be accomplished by voluntary cooperative efforts on the part of mathematics teachers and the teachers of other subjects that apply mathematics, with a healthy mutual respect for the legitimate goals of both groups.

At the high school level many students can apply their problem-solving abilities not only to problems of daily life, to problems from other disciplines, but to serious mathematical problems themselves.

Recommended Actions

6.1 School districts should increase the amount of time students spend in the study of mathematics.

- At least three years of mathematics should be required in grades 9 through 12.
- The amount of time allocated to learning mathematics in elementary school should be increased. It should range from a minimum of about five hours a week in the primary grades to a minimum of about seven hours a week in the upper grades. Part of this time can be gained by a program that stresses the application of mathematical skills in other subjects, especially the sciences and the social studies.
- A clear delineation of what constitutes college-level and precollege mathematics should be made.
- Colleges should not award college credit for courses in which the level of content is that of high school mathematics. This practice encourages students not to elect mathematics in high school beyond the minimum required.

6.2 In secondary school, the curriculum should become more flexible, permitting a greater number of options for a diversified student population.

- Increasing high school requirements in mathematics should not result in keeping all students longer in the same traditional tracks. These recommendations cannot be met with just the two-track alternatives of either general mathematics courses or precalculus courses typical of many existing programs.
- The high school curriculum should provide differing student populations with those appropriately organized areas of mathematical competence required by their needs, talents, and future objectives, but all presented with continual attention to functional problem-solving ability.
- Algebra should be included in the program of all capable students to keep their options open.
- For many students, algebra should be delayed until a level of maturity and basic mathematical understanding permit their taking full advantage of a significant algebra course. For many, this may not be ninth grade but perhaps eleventh or twelfth grade. Significant mathematics courses should be available to these students in ninth and tenth grades, not just the traditional general mathematics review or prealgebra courses.
- If such recommendations are followed, a course providing progress beyond junior high school but paving the way for a useful experience in consumer mathematics and later algebra needs to be developed.

- Consumer mathematics should develop a broader quantitative literacy and should consist primarily of work in informal statistics, such as organizing and interpreting quantitative information.
- All high school students should have work in computer literacy, and the hands-on use of computers, and the applications of computers where possible and appropriate throughout their mathematics programs.
- All students who plan to continue their study of mathematics beyond high school or to use it extensively in technical work or training should be enrolled in mathematics courses throughout their last high school year.

6.3 Mathematics educators and college mathematicians should reevaluate the role of calculus in the differentiated mathematics programs.

- Emerging programs that prepare users of mathematics in nontraditional areas of application may no longer demand the centrality of calculus that has traditionally been demanded for all students. (The Mathematical Association of America's PRIME 80 conference raised questions about the role of calculus as the eventual touchstone that dictated all college preparatory mathematics.)
- In light of this reevaluation, colleges and high schools should reexamine the concept of advanced placement in mathematics. For some students, though fully capable, an advanced placement program restricted to calculus placement may not be the optimal alternative. If advanced placement in mathematics is encouraged, it should be a broader concept that includes options in other branches of the mathematical sciences.

6.4 The curriculum that stresses problem solving must pay special heed to the developmental sequence best suited to achieving process goals, not just content goals.

- From the earliest years, the basic mathematical tools should be acquired within the framework of usage and application, however simple the examples may be at the beginning level.
- Since there are usually multiple approaches to all but the most trivial problems, not all students should be expected to proceed in the same way. Value should be placed on a thoughtful and productive approach, not solely on a single correct answer.
- Since elementary school children differ widely in maturation and intellectual development, the teacher should be prepared to value and reward different contributions made by different students to the solution of a common problem.
- Team efforts in problem solving should be commonplace in the elementary school classroom.
- At middle school and junior high school levels, the focus of the curriculum should be on more formal and more general problem-solving approaches and strategies themselves.
- At middle school and junior high school, instruction should stress the ability to apply techniques used in one situation to new and unfamiliar situations.
- At middle school and junior high school, instruction should stress the ability to select from a range of strategies and to create new strategies by combining known techniques.

- At middle school and junior high school, instruction should aid in the student's transition to more abstract reasoning.
- Difficulty with paper-and-pencil computational algorithms should not interfere with the learning of problem-solving strategies.
- At the junior high school level, calculators should be available so that no student will be excluded from the opportunity to develop these strategies.
- All courses in high school mathematics should include activities in applications.
- Teachers of mathematics and teachers of other disciplines should cooperate in assuring that students perceive the relationship of the mathematics they learn to the mathematics applied in problems in those other disciplines.
- Qualified mathematics teachers should be used as resource specialists for instructional programs in which mathematics methods are applied in other subjects.
- Teachers of mathematics should be prepared in the application of known problem-solving techniques to a variety of problems.

6.5 Teachers, school officials, counselors, and parents should encourage a positive attitude toward mathematics and its value to the individual learner.

- A curriculum that focuses on problem solving should challenge all students. It should present the opportunity for students of all ability levels to make a contribution, and it should promote the attitude that they are capable of solving problems.
- Programs that will encourage a larger percentage of females and minority students to study more mathematics should be designed and supported.
- Parents and counselors should help students to recognize the importance of mathematics study to their futures and guide them to make appropriate school decisions.

6.6 Special programs stressing problem-solving skills should be devised for special categories of students.

- The professionals in mathematics and in special education should work together to identify the process abilities, possible and optimal, for students with handicaps and learning difficulties.
- Perception of what mathematical ability encompasses should be broadened beyond the linear, algorithmic stereotype. The significance of spatial perception and spatial relationships in problem solving needs to be stressed, for many students who do not fare well in algorithmic thinking may have special abilities that are spatial and geometric.
- Increased attention should be paid to developing the potential of the gifted student of mathematics.
- Colleges and schools should cooperate in devising imaginative programs for the mathematically gifted.
- In general, programs for the gifted should be based on a sequential program of enrichment through more ingenious problem-solving opportunities rather than through acceleration alone.
- Materials and resources of a sophistication and depth suitable to the unusual potential of the gifted student in problem solving should be developed.

Recommendation 7: Mathematics teachers must demand of themselves and their colleagues a high level of professionalism.

Educators can gain the support of society and the rewards of a truly effective performance by developing, defining, and enforcing professional standards in terms of highly competent professional performance rather than by any other norm. This must be done to provide the nation, its young people, and its future with the mathematics programs worthy of them and of that future.

Within mathematics teaching

- there are already many well-prepared and effective teachers who provide outstanding professional leadership;
- there are also many teachers who are motivated and desire to improve but who lack adequate preparation and must be given the necessary support to become fully qualified and to improve;
- there are, however, some teachers whose attitudes and functioning are at less than a professional level. In the best interests of students and society, the number of such teachers must be reduced immediately.

Even the best prepared, competent, and dedicated teachers must continue their development to keep abreast of changing needs, tools, and conditions. School administrators have the responsibility to make this possible by providing continuing inservice education and by encouraging teachers to take full advantage of opportunities for maintaining their competence that are offered by professional organizations and universities.

At the beginning of this decade, the schools are faced with a widespread shortage of qualified mathematics teachers. The demand for mathematical competence in many sectors of society is great and growing, and schools find it impossible to compete for individuals who have this desired background. Thus, in many mathematics classrooms, the teacher does not have the subject-matter qualifications for teaching mathematics. School administrators have two obligations: (1) to be forthright and open with the parents about the situation, and (2) to provide special aid and support needed by these teachers until they can make up deficiencies. The professional organizations also have a special responsibility to cooperate in assisting such teachers who are dedicated to improvement. However, the public and its representatives must give high priority to finding ways to solve the worsening problem.

Regardless of preparation, the standard of professionalism should be consistently high, and it is the obligation of any group that wishes to be called a profession to insist that all members maintain this standard.

Teachers must be sensitive to the needs of their students and dedicate themselves to the improvement of student learning as their primary professional objective. The right of students and parents to expect this dedication has correlative responsibilities: a mutual respect and support by the parent of the educational program and a teacher's professional competence, and the acceptance by the student of ultimate personal and active commitment to his or her own learning.

Any teacher who lacks dedication to these professional ideas and to continued self-improvement should not be retained in teaching. Teachers must accept performance and not protectionism as a synonym for professionalism.

During the decade of the 1980s, the continuing appearance of new concepts and theories in mathematics, in the applications of mathematics, and in the teaching-learning process will affect both curriculum and instruction in school mathematics. In order to remain professional, teachers must continue to study in all three areas. This will require of teachers a new level of motivation and dedication.

Recommended Actions

7.1 Every mathematics teacher should accept responsibility for maintaining teaching competence.

- Full advantage should be taken of all existing opportunities for continuing education.
- Teachers should insist that school districts and colleges make provision for inservice education and staff development opportunities.
- Teachers should belong to professional organizations that are dedicated to the improvement of teaching and learning.
- Teachers should participate actively in the efforts of professional organizations to improve teaching and learning.
- Teachers should share ideas and participate with their peers in cooperative efforts at self-improvement, including observation and constructive criticism of one another.
- Teachers as a profession should insist that all members maintain a consistently high standard of professional behavior. The profession is not obligated to protect those individuals who refuse to live up to reasonable professional standards.
- Bargaining units of organizations representing teachers should include in their requests release time for professional development and attendance at professional conferences that provide inservice education.

7.2 School boards and school administrators should take all possible means to assure that mathematics programs are staffed by qualified competent teachers who remain current in their field.

- Necessary incentives must be found to attract competent and dedicated teachers to the profession.
- The status, compensation, and teaching conditions necessary for the retention of qualified teachers must be dramatically improved.
- School districts must budget adequately and provide incentives for teachers to participate in inservice education pertinent to their immediate needs as they prepare to meet the challenges of the future.

- School district staffs, including teachers, must plan inservice education that is articulated with local colleges and universities as well as with professional organizations such as the NCTM and its state and local affiliates.
- School administrators should encourage teachers to take an active professional role and should permit them to participate, without penalty, in conferences and vital professional work.
- School systems should maintain well-qualified mathematics specialists or supervisors at all levels to help teachers achieve the professional level specified in these recommendations and to coordinate mathematics education efforts within the system.
- Well-qualified mathematics specialists should be on the staffs of all governmental agencies that deal with mathematics education - specifically, in all state and provincial departments of education, in the National Education Department, the National Institute of Education, and the National Science Foundation.

7.3 Teacher education institutions and agencies should develop new programs of preparation to incorporate the problem-solving emphases recommended.

- Programs in teacher education must be designed to prepare teachers for new levels of performance and professionalism.
- The effective teaching of problem solving requires thorough preparation both in mathematical content and in teaching methods that develop problem-solving ability.
- Colleges and universities must redesign courses and programs to incorporate revisions recommended for the preparation of mathematics teachers.

7.4 Certification standards for mathematics teaching should be revised and upgraded to incorporate the needs reflected in these recommendations.

- Professional organizations should participate in defining standards for certification of teachers.
- State and provincial departments of education should involve professional organizations in setting professional standards and defining qualifications.
- Professional organizations - such as the Mathematical Association of America, Conference Board of the Mathematical Sciences, National Council of Supervisors of Mathematics - in cooperation with the NCTM should continually review and update their guidelines for the preparation of teachers of mathematics.

Recommendation 8: Public support for mathematics instruction must be raised to a level commensurate with the importance of mathematical understanding to individuals and society.

Solutions to the problems identified in previous sections cannot be achieved solely within the education community but require active participation and support by parental and societal groups.

The mathematics teaching profession recognizes and respects the right of parents and society to hold it accountable for the mathematical competence of children. However, in calling for particular programs of action, parents and society often mistakenly promote activities that are counterproductive to the realization of the goals they support. Communication and cooperation must bridge this gap.

The rededication of teachers called for in Recommendation 7 will be meaningless or impossible if society is not committed to supporting the professionalism it rightfully demands. Today, teachers' financial incentives are neither commensurate with the responsibilities they carry nor adequate to attract and retain them in a demanding, crucial, and sometimes burdensome profession. Few school systems have truly adequate supervisory and material support for the teacher in the maintenance and improvement of the instructional environment. More and more, teachers feel the lack of parental understanding of the complexity of their task and the lack of parental cooperation and support in their efforts to instruct children. Furthermore, governmental support for improving the quality of mathematics teaching has dwindled.

Essential to the success of the program outlined in these recommendations are (1) the willingness of government and private funding agencies to listen and respond more sensitively to the professionals in elementary and secondary mathematics education, and (2) the reestablishment by such agencies of institutes and other programs for the continuing education and upgrading of teachers.

At present, there are too many unnecessary obstacles to the effective functioning of teacher and student in a true teaching/learning interaction. These include more and more time required for unproductive recordkeeping; many unmotivated, undisciplined students; a lack of parental support; ambivalence and vacillation in government regulations; shifting societal priorities; the lack of home and school agreement on out-of-school study assignments.

There are also obstacles faced by school administrators and by the policymaking bodies, the school boards, whose ultimate responsibility is the effectiveness of the school district. It is recognized that in many instances confusions of legalisms and court decisions impose constraints on the ability of these people to accomplish what they agree should be done. Society today is troubled with many complexities. All institutions are threatened. These obstacles should not be an excuse for inaction; rather, in the light of pressing student needs it is imperative that they be surmounted.

All these things make the ideal professional role of the teacher almost impossible; they make it difficult to attract and retain teachers of a level of competence necessary to realize the outlined program. The immediate loser is the individual student, who is excluded from full participation in, and contribution to, society. The ultimate loser is society itself.

The public and its representatives need to confront a serious problem that is increasing in magnitude. There are not enough qualified mathematics teachers to fill mathematics classroom positions. Present enrollments in teacher preparation programs guarantee that the shortage will increase. Mathematics is of critical importance and should be taught by those well qualified and knowledgeable. Such knowledge is not gained in a crash program of short duration. Parents concerned for their children's future and society concerned for its own future should immediately find extraordinary measures to solve this problem.

The professional community and society share a common goal: to bring all citizens to the full realization of their mathematical capacity. This is a complex and delicate task, and it requires the commitment and cooperation of all segments of society, not just the school, parents, and teachers.

Recommended Actions

8.1 Society must provide the incentives that will attract and retain competent, fully prepared, qualified mathematics teachers.

- School districts must provide compensation commensurate with the professionalism and qualifications necessary to achieve our educational goals in mathematics.
- School districts should investigate a variety of incentives and conditions that will stop the drain of qualified mathematics teachers to other, more highly compensated fields of work.
- School districts should assure mathematics teachers a classroom environment and conditions conducive to effective teaching, including a reasonable class size.
- School districts should provide teaching conditions and incentives that will attract dedicated and competent people into the mathematics teaching profession.

8.2 Parents, teachers, and school administrations must establish new and higher standards of cooperation and teamwork toward the common goal of educating each student to his or her highest potential.

- Professionals must respond to calls for maintaining educational standards and must work cooperatively with parents to specify these standards.
- Parents must support the maintenance of agreed on standards of achievement and discipline.
- Programs in mathematics that take full advantage of home and school cooperation should be systematically developed.

- Parents should enter the process of determining educational goals as partners, with shared participation and responsibility for the accomplishment of these goals.
- Parents should support the teacher's assignment of homework when it is reasonable and clearly related to the educational objectives.
- Parents should help guide students to an understanding of their critical need to learn mathematics.
- Parents should help students understand that they have the ultimate responsibility for their own learning and must be active and cooperative participants in the process.
- Parents and teachers should cooperate in a mutually supportive attack on the erosion of respect for authority in the classroom.
- Parents and teachers should cooperate in a mutually supportive attack on the erosion of motivation toward academic achievement.

8.3 Government at all levels should operate to facilitate, not dictate the attainment of goals agreed on cooperatively by the public's representatives and the professionals.

- Government funding agencies should support an emphasis on research and development in applying mathematics to problem solving.
- Teachers should have advisory roles in all decisions of policy and support.
- When legislation affecting education is required, it should be entered into with caution and only after the involvement of educational professionals in formulating and reviewing the mathematical and pedagogical aspects of such legislation.
- Legislation concerning accountability should take into account the multiple factors that determine school achievement.
- Legislators should avoid tendencies to mandate testing as the sole criterion for the evaluation of educational success.
- Mandates for the achievement of minimal competencies should not limit the school mathematics program in its broader range of essential goals.
- Legislation should not determine educational goals but when necessary should facilitate the achievement of cooperatively agreed on objectives.
- Dual respect and effective articulation must become commonplace between the civic leaders who appropriately call for educational accountability and the educational professionals who must formulate responses.

APPENDIX B: A Position Statement - Professional Development Programs for Teachers of Mathematics

By the National Council of Teachers of Mathematics, 1985

Teachers of mathematics, like all professionals, require ongoing and cumulative professional development programs that enhance and maintain their teaching skills and knowledge. Because mathematics and education are disciplines that grow and change, teachers cannot depend on what they learned as undergraduates to carry them through their entire careers. Findings of research continually increase our understanding of teaching and learning. Further, social and technological changes increase the average citizen's need to understand and use mathematics. These forces demand reconsideration of the content and methods of mathematics instruction.

Curricular and instructional changes, however, do not occur automatically. The extent to which new ideas and techniques are integrated with current classroom practices depends on teachers' knowledge, motivation, and commitment to continued professional growth. The improvement of mathematics programs depends on well-prepared and well-informed teachers.

Such changes and improvement require teachers to have opportunities for high-quality professional development. The provision of these opportunities, which should maintain, enrich, and improve the skills and abilities that teachers need to serve their students best, is the shared responsibility of districts, schools, and individual teachers.

To help promote high-quality classroom instruction in mathematics, the National Council of Teachers of Mathematics encourages and supports the development and implementation of comprehensive professional development programs. The Council recommends that such programs be developed in accord with the following guidelines:

1. Professional development programs for teachers of mathematics should be based on a strong commitment to professional growth.

    a. An appropriate person should be responsible and accountable for the professional development of the teachers.

    b. Sufficient time should be allocated for individuals to assess the needs, plan activities, lead or participate in programs, and evaluate outcomes.

    c. Sufficient funds should be available to support professional development programs and ensure teachers' participation in them.

2. Professional development programs for teachers of mathematics should be carefully planned.

    a. Clear objectives should be established.

    b. The programs should improve students' learning experiences by improving the skills and knowledge of their teachers.

c. Those whom the programs are designed to assist should contribute significantly in planning the programs.

d. Extensive assessment of individual and collective needs should serve as bases of the programs.

e. Current concerns and issues in mathematics education should be reflected in the content of the programs.

f. The programs should be ongoing and cumulative.

3. Professional development programs for teachers of mathematics should recognize individual differences.

   a. Varied formats, including workshops, conferences, institutes, courses, and in-school discussion sessions, should be used.

   b. Programs should be tailored to meet the needs of teachers whose knowledge, skills, and experiences are diverse.

4. Professional development programs for teachers of mathematics should be effectively conducted and should include the following features:

   a. A blending of mathematical content and effective pedagogy

   b. Active participation of teachers

   c. Attention to the concrete, day-to-day problems of teachers

   d. An integration of theory and practical applications

   e. Communication of objectives to participants

   f. Opportunities for teachers to practice new skills and techniques in the classroom

   g. Incorporation of support and follow-up activities

5. Professional development programs for teachers of mathematics should be systematically evaluated, with attention to these issues:

   a. Determining whether the needs they are designed to meet have been satisfied.

   b. Using the results from the evaluation to improve and develop future programs.

Excellent sources of assistance in implementing the guidelines listed above include the meetings, conferences, and publications of the National Council of Teachers of Mathematics and its local, state, or provincial affiliated groups.

- Used with permission from the National Council of Teachers of Mathematics

APPENDIX C: A Position Statement - Calculators in the Mathematics Classroom

By the National Council of Teachers of Mathematics, 1986

The National Council of Teachers of Mathematics recommends the integration of the calculator into the school mathematics program at all grade levels in classwork, homework, and evaluation. Although extensively used in society, calculators are used far less in schools, where they could free large amounts of the time that students currently spend practicing computation. The time gained should be spent helping students to understand mathematics, to develop reasoning and problem-solving strategies, and, in general, to use and apply mathematics.

At each grade level, every student should be taught how and when to use the calculator. To use calculators effectively, students must be able to estimate and to judge the reasonableness of results. Consequently, an understanding of operations and a knowledge of basic facts are as important as ever. The evaluation of student understanding of mathematical concepts and their application, including standardized tests, should be designed to allow the use of the calculator.

The National Council of Teachers of Mathematics recommends that all students use calculators to:

- concentrate on the problem-solving process rather than on the calculations associated with problems

- gain access to mathematics beyond the students' level of computational skills

- explore, develop, and reinforce concepts including estimation, computation, approximation, and properties

- experiment with mathematical ideas and discover patterns

- perform those tedious computations that arise when working with real data in problem-solving situations

The National Council of Teachers of Mathematics recommends that publishers, authors, and test writers integrate the use of the calculator into their mathematics materials at all grade levels.

- Used with permission from the National Council of Teachers of Mathematics

APPENDIX D: A Position Statement - Provisions for Mathematically Talented and Gifted Students

By the National Council of Teachers of Mathematics, October 1986

All students deserve the opportunity to achieve their full potential; talented and gifted students in mathematics deserve no less. It is a fundamental responsibility of all school districts to identify mathematically talented and gifted students and to design and implement programs that meet their needs. Further, it is the responsibility of mathematics educators to provide appropriate instruction for such students.

The identification of mathematically talented and gifted students should be based on multiple assessment measures and should involve teachers, counselors, administrators, and other professional staff. In determining admission to talented and gifted programs, the evaluators must consider the student's total educational development as well as his or her mathematical ability, achievement and aspirations. Eligible students and their parents should fully understand the nature and demands of the program before making a commitment to participate. Unqualified students should not be admitted for any reason.

The needs of mathematically talented and gifted students cannot be met by programs of study that only accelerate these students through the standard school curriculum, nor can they be met by programs that allow students to terminate their study of mathematics before their graduation from high school. The curriculum should provide for all mathematically talented and gifted students every year they are in school. These students need enriched and expanded curricula that emphasize higher-order thinking skills, nontraditional topics, and applications of skills and concepts in a variety of contexts.

Therefore, the National Council of Teachers of Mathematics recommends that all mathematically talented and gifted students should be enrolled in a program that provides a broad and enriched view of mathematics in a context of higher expectation. Acceleration within such a program is recommended only for those students whose interests, attitudes, and participation clearly reflect the ability to persevere and excel throughout the entire program.

- Used with permission from The National Council of Teachers of Mathematics

APPENDIX E: A Position Statement - Research in Mathematics Education

By the National Council of Teachers of Mathematics, April 1986

Significant improvements in the teaching and learning of mathematics result from the systematic development of research-based knowledge. Such knowledge is relevant to the needs of all persons associated with mathematics education. For example, research that supports the value of a particular instructional approach benefits students and teachers. Research that suggests directions for program and policy decisions provides guidance to administrators, supervisors, and curriculum developers. Research that clarifies our understanding of basic learning principles benefits everyone.

The greatest gains in research-based knowledge are made when research efforts are collaborative. Classroom teachers, supervisors, mathematicians, teacher educators, and curriculum developers can all play important roles in research. For example, classroom teachers can identify problems for research; mathematics supervisors and teacher educators can communicate research findings to inservice and preservice teachers; mathematicians and curriculum developers can implement research findings in the preparation of student and teacher instructional materials.

Further gains in research-based knowledge are made when mathematics educators are aware of research in other disciplines and work collaboratively with researchers in these disciplines. But it is the mathematics educators themselves, trained in the content and methods of teaching mathematics, who must assume leadership roles in conceptualizing, communicating, and implementing research related to mathematics instruction.

The National Council of Teachers of Mathematics (NCTM) affirms the central role of research in the teaching and learning of mathematics. NCTM therefore supports research in mathematics education and promotes efforts to communicate the findings and implications of such research. Moreover, NCTM encourages all mathematics educators to be involved in activities related to research.

- Used with permission from The National Council of Teachers of Mathematics

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SCIENCE

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INTRODUCTION

The Science Proficiency Guide attempts to provide Indiana schools with the best current thinking and research about the contributions science learning experiences can contribute to the education of today's students as they prepare to become citizens of the twenty-first century.

The guide has been prepared to provide Indiana schools with another resource document in responding to the Indiana State Board of Education directive to "maintain instructional programs which provide all students with opportunities to acquire minimum proficiencies" in all listed areas and courses [511 IAC 6-2-2, 3, 4, & 5].

The proficiencies should not be viewed as the state-mandated program for science instruction but as a suggested list of learnings which Indiana students should have opportunity to experience if they are to be effective participants in an information-rich society which is increasingly dependent on science and technology.

ACKNOWLEDGEMENTS

This guide reflects the work of several task groups which have directly involved many Indiana educators. Through the Indiana Science Leadership and Resource Network, the product of these task groups has been reviewed by nearly 2000 teachers, administrators, and university educators. Not all recommendations offered by the network could be directly incorporated into the science proficiency statements, but all suggestions were carefully considered as the developers strove to make the Science Proficiency Guide a most useful force for the revitalization of science education in the state's elementary and secondary schools.

Although it is impossible to list the names of all those who were involved in the review of this guide, we would like to express our gratitude to them. We would also like to acknowledge especially the following educators who served on the task forces and who contributed their expertise and their time to this important work.

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USE OF THE GUIDE

The Science Proficiency Guide is intended to give direction to local school corporation personnel as they develop or review/revise their own science guides. The Foundation Proficiency Statements (listed on page 9) list the desirable outcomes of K-12 science programs. The Specific Proficiency Statements, listed for developmental levels (K/Primary, Upper Elementary, Middle/Junior High School, Senior High School), cite the skills and knowledge that should be developed through learning experiences provided at those levels. These are essential for acquiring the foundation proficiencies. Local school curriculum planners may identify additional student outcomes which they wish to develop through the local school science program. They may also want to identify, more specifically, the attitudes, skills, and knowledge that students should develop at each grade or in each science course.

Local school personnel using the Science Proficiency Guide should be aware of the following characteristics.

- Correlation of Foundation and Specific Proficiency Statements

  There has been no attempt to develop a one-to-one correspondence between the lists of specific proficiency statements and the foundation proficiency statements. Rather, each list of specific proficiency statements was checked to determine if it included the types of learning necessary to realize the foundation proficiency statements by high school graduation. Some specific proficiency statements delineate learning experiences that contribute to two or more of the foundation proficiencies; in other cases, two or more specific proficiencies may support a single foundation proficiency.

- Prerequisite Objectives to be Supplied

  Although the specific proficiency statements define some overall skill development sequences, many specific subskills are omitted. For example, both sets of high school proficiencies address problem solving and decision making, but at no point are the strategies, or steps, of problem solving and decision making specified. This void occurs since the specific proficiencies address only terminal abilities at each developmental level. Assembling an appropriate sequence of coursework and daily learning experiences for students to acquire the proficiency is the proper domain of curriculum designers and classroom teachers at the local school corporation level.

- Proficiency Indicator List Not Comprehensive

  The indicators enumerated for each specific proficiency statement are examples only. Since they are not all-inclusive, local curriculum planners may find it helpful to supplement these lists. Particularly at the high school level, teachers of a specific science course are encouraged to develop a list of indicators describing the learning experiences that their courses should promote.

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USE OF THE GUIDE (cont.)

- Specific Proficiencies Are Developmental

  Even though not all developmental steps are identified by the proficiencies, they do incorporate several developmental sequences as the specific proficiencies progress through the various developmental levels. Therefore, teachers at each level need to review the specific science proficiencies for the preceding levels in order to design appropriate refresher or remedial experiences while eliminating overly redundant student experiences.

HIGH SCHOOL PROFICIENCY STATEMENTS

Even though the foundation proficiency statements state the goals or terminal performances expected of high school graduates, it is necessary to describe these performances in greater detail in order for them to be effective tools for high school curriculum/instructional planning. Specific proficiency statements have been developed for two high school student populations.

- The **functional high school science proficiency statements** address programs for the fifteen to twenty percent of the students who will take the two required years of science but who are unlikely to pursue any post-secondary education. These specific proficiency statements identify those science-based abilities needed to function productively in a scientific/technical society, i.e., the skills needed to be effective citizens, consumers, workers, and voters in the twenty-first century.

- The **academic high school science proficiency statements** address the needs of all other students. Although not all will pursue formal post-secondary study, most will continue to be active, inquisitive learners throughout life. Thus, these statements speak to the sciencing skills and understandings needed to make sense out of and be active participants in an information age.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency,** as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling. In science, these statements are listed by developmental levels - kindergarten/primary, upper elementary, middle school, and high school - functional and academic.

C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in science. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **science** proficiencies:

Foundation Proficiency Statements	060000
Specific Proficiency Statements	
Kindergarten/Primary	061000
Upper Elementary	062000
Middle/Junior High School	063000
Senior High School	
Functional	064001
Academic	064002

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

STATEMENT OF PHILOSOPHY - SCIENCE

Education, designed for twenty-first century citizens, must focus on the science process skills of information access and retrieval, critical thinking, communication, and the use of scientifically generated theories and principles in problem solving and decision making.

The emphasis on the skills and strategies does not nullify the need for knowledge of science facts, concepts, theories, laws, and principles; rather it highlights the need to allow students to experience the utility of this knowledge - even during their initial exposure to it. Although the foundation and specific proficiency statements for science are stated in terms of skills development, the proficiency indicators incorporate science content. As school corporations and classroom teachers flesh out the proficiency statements with additional indicators appropriate to local and individual student needs, the role of science content will become apparent. However, science programs which do not provide students with opportunities to realize and become proficient in applying the utility of scientific and technological knowledge will be of little value to students.

FOUNDATION PROFICIENCY STATEMENTS - SCIENCE

List 060000

Students in Indiana schools will be provided **science** learning experiences which allow them to:

1. use data gathering and organization skills to identify and investigate questions and assumptions.
2. apply communication skills to exchange self-generated and acquired knowledge.
3. use the major ideas of science in rational, creative thinking.
4. appreciate the tentative nature of empirical knowledge.
5. appraise technological applications of scientific discoveries in terms of their ethical effects.
6. demonstrate competence and confidence in applying the knowledge, processes, and attitudes of science in making informed decisions.

SPECIFIC PROFICIENCY STATEMENTS - KINDERGARTEN/PRIMARY LEVEL

Proficiency List 061000

Through **science** learning opportunities provided at kindergarten and the primary level, students should:

1. use the five senses to gather and collect data.
2. sort, group, or arrange objects, systems, ideas, or events on the basis of similarities, differences, or a suggested standard.
3. use simple instruments to describe observations more accurately.
4. infer possible explanations of conditions of changes.
5. use data to forecast or predict future events or conditions.
6. explore things and events to better understand the world.
7. identify ways science and technology affect their lives.
8. communicate scientific and technological information and ideas.

SPECIFIC PROFICIENCY STATEMENTS - UPPER ELEMENTARY LEVEL

Proficiency List 062000

Through **science** learning opportunities provided at the upper elementary level, students should:

1. use basic investigation skills in examining new events and ideas.
2. select and use reliable, relevant sources of information.
3. identify relationships between independent and dependent variables.
4. invent and test "if...then" speculations.
5. identify key persons and episodes in the development of science and technology.
6. modify concepts because of newly acquired information.
7. forecast how the changing of one factor can alter the environment.
8. use a variety of skills to communicate scientific and technological information.

SPECIFIC PROFICIENCY STATEMENTS - MIDDLE SCHOOL LEVEL

Proficiency List 063000

Through **science** learning opportunities provided at the middle school level, students should:

1. use concrete data gathering and investigating skills in examining interactions and concepts.
2. assess sources of scientific and technological information for their validity and utility.
3. analyze natural and technological systems.
4. propose generalizations (principles, theories, etc.) that unify a variety of observations and data.
5. use scientific and technological information to propose solutions to human problems and social issues.
6. define the role that key episodes in the history of science and technology have had in human understanding and management of nature.
7. revise ideas about how things work when additional valid information is presented.
8. describe how applications of scientific discoveries have affected mankind and the environment.
9. communicate scientific and technological information.

SPECIFIC PROFICIENCY STATEMENTS - HIGH SCHOOL (FUNCTIONAL LEVEL)

Proficiency List 064001

Through **science** learning opportunities provided at the high school level, students planning limited post-secondary education should:

1. use acquired information processing skills to investigate new ideas and problems.
2. develop qualitative and quantitative classification schemes.
3. access dependable scientific and technological information.
4. use the laws, theories, and principles of science to organize data and information.
5. demonstrate a willingness to reevaluate existing ideas as a result of obtaining new information.
6. use scientific and technological information in making decisions about personal concerns.
7. cite examples of the interdependence of science, technology, and society.
8. communicate technological ideas in written and verbal formats.

SPECIFIC PROFICIENCY STATEMENTS - HIGH SCHOOL (ACADEMIC LEVEL)

Proficiency List 064002

Through learning opportunities provided in **the sciences** at the high school level, students planning post-secondary study should:

1. safely use appropriate technology to extend the senses.
2. access reliable information from any area of pure and applied science.
3. use empirical data to formulate, support, or question generalized statements, including the laws, theories, and principles of science.
4. apply the scientific knowledge and processes to the resolution of complex problems and issues.
5. recognize that scientific knowledge is tentative, self-corrective, and visionary.
6. use scientific and technological information in developing personal viewpoints, societal decisions, and career plans.
7. illustrate the interdependence of science, technology, and society.
8. communicate information on scientific and technological issues.

SCIENCE
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 061000

Specific Proficiency Statements	**Sample Indicators**
Through **science** learning opportunities provided at kindergarten and the primary levels, students should	Students will
1. use the five senses to gather and collect data.	a. discriminate among sets on the basis of observable properties. b. identify sounds on the basis of loudness, pitch, or duration. c. describe objects in terms of hotter or colder. d. discriminate among substances that are solids, liquids, or gases. e. describe foods on the basis of taste.
2. sort, group, or arrange objects, systems, ideas, or events on the basis of similarities, differences, or a suggested standard.	a. sort plants from animals based upon given standards. b. sort living from nonliving things based upon given standards. c. classify objects or events in the natural world based upon a selected similarity or difference. d. select objects that may have further use from a group of objects that have served the purpose for which they were designed.
3. use simple instruments to describe observations more accurately.	a. quantify size in three dimensions. b. measure objects in order to compare their size, weight, temperature, direction, or location. c. use different types of lenses to observe objects. d. describe different sounds after listening to them with a stethoscope.

Specific Proficiency Statements	Sample Indicators
4. infer possible explanations of conditions or changes.	a. describe seasons with respect to rotation and revolution of the earth around the sun. b. explain night and day in terms of the earth's rotation. c. suggest explanations for fossils. d. identify possible sources of various kinds of energy. e. suggest explanations for the forms of matter. f. propose explanations for physical or chemical changes in matter.
5. use data to forecast or predict future events or conditions.	a. use past observations to suggest changes in the weather. b. predict anticipated seasonal events. c. suggest cycles in plants, animals, and natural events. d. predict interaction of physical substances based upon previous experiences.
6. explore things and events to better understand the world.	a. compare observations, inferences, and conclusions with those of classmates. b. plan simple experiments to verify data or statements. c. propose an alternative for an ineffective solution. d. make predictions from observed data. e. describe the interdependence of people and their environments. f. construct a 3-dimensional model of an object that they have measured or found the dimensions for.
7. identify ways science and technology affect their lives.	a. name several man-made products that pollute or reduce pollution. b. list concerns about water pollution. c. use pictures to illustrate a variety of land uses. d. name ways various sounds can affect their peace and health. e. describe how science and technology have improved our ability to move about, communicate, and live in more comfortable environments. f. list discoveries that have improved daily life. g. use technology to expand their investigative skills. h. identify ways to improve the environment in the local community.

Specific Proficiency Statements	**Sample Indicators**
8. communicate scientific and technological information and ideas.	a. describe orally a living or nonliving system. b. describe changes in characteristics of living or non-living systems or events over a period of time. c. construct graphs to describe space/time occurrences. d. interpret data from graphs. e. use maps to give directions.

SCIENCE
UPPER ELEMENTARY LEVEL

Proficiency List 062000

Specific Proficiency Statements	**Sample Indicators**
Through **science** learning opportunities provided at the upper elementary level, students should	Students will
1. **use basic investigation skills in examining new events and ideas.**	a. observe, measure, and record changes using a variety of measuring devices. b. describe new experiences in terms of known information. c. estimate quantitative observations. d. classify objects based upon observation and/or manipulation.
2. **select and use reliable, relevant sources of information.**	a. identify reliable sources of scientific information. b. discriminate pertinent and nonpertinent information in journals or other scientific sources. c. evaluate information in terms of its adequacy and the reliability of the source.
3. **identify relationships between independent and dependent variables.**	a. demonstrate ways to change the speed of an object. b. explain daily and seasonal changes in terms of the earth's rotation and tilt. c. identify ecological factors that affect growth rates. d. describe an environmental problem in terms of cause and effect. e. demonstrate that there is an equal and opposite reaction to any force exerted on an object. f. demonstrate competition of plants and animals for basic needs. g. cite examples of regularity and order in nature.

Specific Proficiency Statements	Sample Indicators
4. invent and test "if...then" speculations.	a. construct models to describe the origin of present earth structures. b. predict possible results of introducing a new predator into a community. c. design a device to accomplish a task, then build and test the device or a scale model of it. d. invent and test one or more models that might explain the volume, density, and flow characteristics of the states of matter. e. develop and test a solution to a real or imaginary problem. f. test predictions about chemical reactions, geologic change, appearance of offspring, environmental problems, natural events, etc.
5. identify key persons and episodes in the development of science and technology.	a. cite people and discoveries which have affected current scientific thought. b. identify the developmental steps that led to a given technology. c. describe how scientific discoveries and technological applications have affected the quality of life.
6. modify concepts because of newly acquired information.	a. design a test to provide additional information about a question. b. gather new evidence about the environment. c. propose alternate methods for doing routine activities. d. demonstrate a better understanding of the earth after studying the rock record. e. use new sources of information to reexamine previous learning and experimental conclusions.
7. forecast how the changing of one factor can alter the environment.	a. use data to show that a particular pollutant may alter the environment. b. predict how the altered use of one resource may affect the demand for other resources. c. chart how population growth affects renewable and nonrenewable resources. d. develop a model that relates population increases to pollution, space, or limited resources. e. project how eliminating a common disease could change the quality of life worldwide.

Specific Proficiency Statements	Sample Indicators
8. use a variety of skills to communicate scientific and technological information.	a. utilize graphs to communicate space/time events. b. describe procedures of investigation. c. explain a specific application of science to technology. d. prepare reports containing observations and conclusions. e. construct diagrams or models to depict such things as the solar system, life cycles, and weather cycles.

SCIENCE
MIDDLE SCHOOL LEVEL

Proficiency List 063000

Specific Proficiency Statements	**Sample Indicators**
Through **science** learning opportunities provided at the middle school level, students should	Students will
1. **use concrete data gathering and investigating skills in examining interactions and concepts.**	a. classify objects or events using observed similarities and differences. b. measure the size, mass (weight), time, and temperature of objects in appropriately identified units within an acceptable degree of accuracy. c. use measurements to calculate quantities, such as velocity, density, acceleration, temperature gradient, electrical resistance, growth rates, energy, biomass. d. design and conduct controlled experiments to test the validity of their generalizations.
2. **assess sources of scientific and technological information for their validity and utility.**	a. distinguish fact from opinion. b. select appropriate sources of scientific and technological information.
3. **analyze natural and technological systems.**	a. identify and describe the function of the parts of living systems. b. identify the components of nonliving systems (electrical circuits, energy cycle, water cycle, chemical reactions, nitrogen cycles). c. identify phenomena that cause changes in earth conditions. d. identify outstanding characteristics of celestial phenomena. e. determine why a machine or an appliance is not working.

Specific Proficiency Statements	Sample Indicators
4. propose generalizations (principles, theories, etc.) that unify a variety of observations and data.	a. recognize relationships between/among measured variables. b. propose relationships among matter (mass), forces, motion, and energy (work) from personally collected or other available data. c. propose a concept or principle about an organism which explains its behavior.
5. use scientific and technological information to propose solutions to human problems and social issues.	a. use nutrition principles to develop weekly menus for oneself and family. b. use concepts of mass and energy conservation to design waste management systems for home, school, and community. c. discuss the pros and cons of various recreational activities in terms of their effects on personal health, environment, and energy supplies.
6. define the role that key episodes in the history of science and technology have had in human understanding and management of nature.	a. identify how medical discoveries have affected human health. b. trace how development of energy resources has changed the course of history. c. identify the effects of technology on the growth of communications. d. describe how mankind's view of his relationship with the universe has changed over time.
7. revise ideas about how things work when additional valid information is presented.	a. continue to collect data relevant to food choices, recreational habits, etc. b. incorporate scientific developments to modify personal views about the nature of the man-made and natural environment. c. evaluate conditions in their environment which have affected the quality of life.
8. describe how applications of scientific discoveries have affected mankind and the environment.	a. contrast the environmental effects of using agricultural pesticides with their qualitative and quantitative effects on food production. b. compare the effects of automation on product quality and its effects on worker self-concept. c. contrast the impact of medical knowledge on the economic and ethical quality of life. d. identify new career opportunities that result from application of recent scientific discoveries.

Specific Proficiency Statements	**Sample Indicators**
9. communicate scientific and technological information.	a. display data in meaningful tables and graphs.
	b. design a model to predict future events or conditions.
	c. translate chemical equations into meaningful verbal sentences.
	d. prepare and present a report that includes supporting material.

SCIENCE
HIGH SCHOOL - FUNCTIONAL

Proficiency List 064001

Specific Proficiency Statements	**Sample Indicators**
Through **science** learning opportunities provided at the high school level, students planning limited post-secondary education should	Students will
1. **use acquired information processing skills to investigate new ideas and problems.**	a. make distinctions among observations, predictions, and inferences. b. group ideas, facts, or concepts in a way they can be used in problem solving. c. measure length, mass, volume, time, temperature, and pressure using proper instrumentation. d. identify the interrelationships of cells to living systems. e. graph changes over a period of time. f. recognize or describe a chemical reaction. g. explain how energy is transformed, transferred, or stored in natural and technological systems.
2. **develop qualitative and quantitative classification schemes.**	a. order a collection of objects or events using a systematic pattern. b. classify nonliving and living materials by obvious characteristics. c. draw a concept map (flowchart or schematic) to explain relationships between simple concepts.
3. **access dependable scientific and technological information.**	a. develop criteria for discerning reliable scientific and/or technological information. b. select information sources that are useful in researching a technological problem. c. identify information sources related to a personal problem.

Specific Proficiency Statements	Sample Indicators
4. use the laws, theories, and principles of science to organize data and information.	a. cite examples which show that life, physical, chemical, and geologic processes tend toward equilibrium. b. use appropriate laws to explain relationships among variables, e.g., velocity/distance/time. c. explain atmospheric changes using temperature and pressure laws. d. relate the effects of carrying capacity, food supply, and prey-predator relationships on population fluctuations. e. explain how heredity and environment affect offspring.
5. demonstrate a willingness to reevaluate existing ideas as a result of obtaining new information.	a. refine previously developed mental models about an issue on the basis of new information received. b. evaluate new technological applications in terms of the quality of life they will produce. c. implement a plan to assure the best possible future for society after refining concepts about how things are or are likely to be.
6. use scientific and technological information in making decisions about personal concerns.	a. explore ways food production technology affects eating habits. b. examine the effects of medical technology on the quality of life (consider such issues as individual health, life span, living space, employment, feeling of personal worth). c. determine the scientific and technological knowledge and skills needed for various jobs. d. describe how technological developments (such as robots) have affected the job market. e. relate how genetic engineering can affect one's future health and well-being.
7. cite examples of the interdependence of science, technology, and society.	a. relate the history of science discoveries to current applications such as antibiotics, vaccines, and crop production. b. identify the impact, both good and bad, that the chemical industry has had on society. c. debate the positive and negative effects of nuclear energy.

Specific Proficiency Statements	Sample Indicators
	d. identify sources of pollution (gaseous, liquid, solid, noise, chemical, etc.) and describe how they impact the environment. e. discuss the history of transportation and its impact on society. f. apply knowledge of current energy sources to our present and future living conditions.
8. communicate technological ideas in written and verbal formats.	a. use symbols to express scientific thought, e.g., chemical formulas, physical laws. b. graph information for presentation to others. c. explain laws and principles as they apply to specific physical and biological situations. d. describe a technological process such as industrial or maintenance in sufficient detail for replication by someone else.

SCIENCE
HIGH SCHOOL - ACADEMIC

Proficiency List 064002

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in the **sciences** at the high school level, students planning post-secondary study should	Students will
1. safely use appropriate technology to extend the senses.	a. properly use appropriate equipment when examining biological specimens, rocks, stars, etc. b. select and properly use appropriate instruments to measure temperature, pressure, voltage, amperage, light intensity, pH, radiation, magnetic fields, etc. c. assemble appropriate instrumentation when analyzing materials and systems. d. use the computer to collect, retrieve, organize, and transmit data. e. observe appropriate safety precautions when doing laboratory and field investigations.
2. access reliable information from any area of pure and applied science.	a. access a variety of reliable data bases. b. refer questions to appropriate resource persons. c. use library reference skills. d. require appropriate evidence of the validity of any information used in scientific studies, technological designs, or decision making.
3. use empirical data to formulate, support, or question generalized statements, including the laws, theories, and principles of science.	a. generalize results of laboratory observations. b. formulate generalizations from acquired information. c. analyze data to support or question published reports and proposals. d. explore the effect of new data on currently held conclusions, including both those found in the literature and personally generated. e. detect and apply regularities, order, and/or periodicity in gathered data to predict future events.

Specific Proficiency Statements	Sample Indicators
4. apply scientific knowledge and processes to the resolution of complex problems and issues.	a. propose designs for a variety of communication systems using both wave and particle motion concepts. b. evaluate the consequences of implementing a proposed industrial chemical procedure based on knowledge of the periodic table, bonding theory, acid-base interaction, oxidation-reduction, solubility laws, etc. c. extrapolate existing data to predict events such as the time and location of earthquakes, changes in coastlines, world food supply, world resource reserves, evolutionary changes, etc. d. explain how knowledge of energy flow in the hydrologic cycle, photosynthesis, the Kreb's Cycle, etc. can affect the solutions one might propose for world energy or food problems. e. predict future conditions based on exponential relationships, e.g., radioactivity, growth curves, population.
5. recognize that scientific knowledge is tentative, self-corrective, and visionary.	a. explain the role of key personalities, episodes, discoveries, and inventions in the development of scientific generalizations and technological advances. b. draw time lines to illustrate the sequences of events leading to various scientific and technological breakthroughs. c. present case histories of various scientific or technological advancements. d. describe how various scientific understandings and beliefs have changed over time. e. identify past scientific, medical, agricultural, and technological ideas and/or procedures which are no longer considered valid. f. project future modifications in resource utilization, production methods, genetic engineering, etc. which may result from recent discoveries. g. identify questions still requiring answers.

Specific Proficiency Statements	Sample Indicators
6. use scientific and technological information in developing personal viewpoints, societal decisions, and career plans.	a. use scientific information and processes in selecting items for personal purchase. b. examine the viewpoints of political action groups, public figures, or political platforms on key scientific or technological issues. c. describe the kinds of reviews research results should receive before they are incorporated into a manufacturing process. d. assess possible careers in science and science-related fields. e. identify the specific science training required for entry into various careers. f. discuss the ethical issues that should be considered in providing genetic counseling.
7. illustrate the interdependence of science, technology, and society.	a. project the cost of solving and managing a local pollution problem. b. explain the impact of new products such as insecticides, food substitutes, food additives, new medicines, and drugs on life spans, population problems, and natural resource reserves. c. project possible problems associated with our ability to control nature (i.e., through genetic engineering, etc.). d. identify and explain problems associated with energy production from fossil fuels, nuclear energy, etc. e. project the impact of the information age on jobs, the economy, life-styles, etc. f. predict world leadership roles for various nations based upon their commitment to research and its technological application. g. examine how modern life-styles are dependent upon past scientific discoveries. h. discuss the pros and cons of making wider use of automation and robotics in industrial and commercial processes.

Specific Proficiency Statements	**Sample Indicators**
8. communicate information on scientific and technological issues.	a. organize and display data in the form of charts, graphs, or other visuals to communicate information. b. explain scientific theories, laws, or principles orally, in writing, graphically, or with models. c. record experimentally acquired data to the precision appropriate for the measuring instrument utilized. d. provide an intended audience with appropriate evidence of the validity of a report being prepared on a laboratory experiment, a field investigation, or a literature search. e. plot data in order to detect trends, perceive discrepancies, and make predictions. f. report on an experimental procedure in sufficient detail for its replication to verify findings.

SOCIAL STUDIES

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INTRODUCTION

The Social Studies Proficiency Guide has been written to provide support and assistance to local school corporations in their efforts to develop a comprehensive K-12 social studies program. The proficiencies reflect current research in the field of social studies and the experiences of many Indiana social studies educators. Although the proficiencies should not be viewed as a state-mandated program for instruction in social studies, it is hoped that they will provide a practical model for curriculum building in social studies at the local school corporation level.

Suggestions for improving the guide from those who are using it are always welcome.

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STATEMENT OF PHILOSOPHY

DEFINITION

Although there are numerous definitions of social studies, the following statement by the National Council for the Social Studies reflects many of the elements important to a social studies program:

> Social studies is a basic subject of the K-12 curriculum that (1) derives goals from the nature of citizenship in a democratic society that is closely linked to other nations and peoples of the world; (2) draws its content primarily from history, [geography], the social sciences, and, in some respects, from the humanities and science; and (3) is taught in ways that reflect an awareness of the personal, social, and cultural experiences and developmental levels of learners.[1]

RATIONALE

The social studies curriculum should provide preparation for and practice of lifelong citizenship skills. For this reason, a definition of social studies which is based on the nature of "... citizenship in a democratic society..." must necessarily focus upon the development of **skills for critical thinking, decision making**, and **participation**. In a democratic society, citizens of all ages must make decisions that affect themselves, their families, their communities, their nation, and the world. The primary goal of social studies education, therefore, should be to help students develop the ability to **make well-informed, well-reasoned decisions** and to **act responsibly**. Responsible decision making requires practicing the skills of acquiring, evaluating, and using information for the purpose of identifying alternative courses of action and predicting their possible consequences. An effort to choose among alternative actions and their consequences must take human needs and values into consideration. Through the actual practice of these skills throughout the K-12 social studies curriculum, students develop the desire and commitment to involve themselves in the democratic process.

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[1] In Search of a Scope and Sequence for Social Studies," Social Education (April 1984), p. 251.

STATEMENT OF PHILOSOPHY (cont.)

A social studies program which has the development of responsible citizenship as its goal must, therefore, provide students with the skills that allow them to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate as citizens of a democracy.**

Gaining knowledge implies not just the acquiring of facts and information, but knowing where and how to find information and how to accurately record information (research and study skills). Students who are able to gain knowledge do not just passively receive information. They actively seek out data and ideas from a variety of sources.

The processing of information means the interpretation and application of knowledge to life situations. Students who are able to process information are able to communicate data and ideas in various forms. They are able to explain the relationships between factors and to use data to find solutions to problems. They are able to separate complex ideas or bodies of information into component parts and to identify organizational principles. They are able to combine ideas and information to create something that is new - a plan, a presentation, a solution - and to communicate these insights to others.

Ultimately, the development of thinking and decision-making skills should inform responsible social participation. The consideration of values and beliefs is essential to the decision-making process. This means that students should be able to evaluate information and to make judgments. They should be able to weigh the consequences of alternative solutions and courses of action and to make choices or decisions.

By necessity, the making of choices and decisions takes place in a social context. Responsible citizens must realize how their decisions and actions affect other individuals and the general welfare. Responsible citizenship involves gathering information, thinking critically and exercising judgment regarding social and political issues. In order for students to develop citizenship skills, they must be provided with opportunities to practice and participate in the democratic process in ways that are suitable for their ages and levels of development. Through such participation, students will not only acquire citizenship skills but develop the commitment to apply those skills to make social decisions.

ABOUT THE SOCIAL STUDIES PROFICIENCY GUIDE

The Social Studies Proficiency Guide presents an integrated, interdisciplinary approach to teaching social studies content with the goal of developing thinking and decision-making skills for responsible citizenship. The proficiency guide reflects the position that thinking skills are best practiced systematically throughout the subject areas of the social studies curriculum. In this way, students develop the ability to transfer thinking skills to other subjects in school and to life situations outside of school.

In terms of content, the guide is intended to correspond to the "expanding horizons" curriculum which uses the child's environment and experiences as the starting point for learning about the larger world. This model suggests the following outline.

Grades K-1	- Investigation of self, family, home, school, and neighborhood; the ways people live and work together around the world.
Grade 2	- School neighborhoods and neighborhoods in other countries; how local communities help to meet people's needs.
Grade 3	- Development of the local community, other communities in states and regions in other parts of the world; how people in communities adapt to the environment, develop and use technology and human and natural resources.
Grade 4	- Indiana and its relationships to national, regional, and world communities, focusing on the influence of the past, the distribution of human and natural resources, and the influence of geography and economics on development.
Grade 5	- The United States, focusing on the influence of geography, history, physical and cultural environments on growth and development.
Grade 6	- Comparative study of the regions and nations of the Western World (Western Hemisphere, Western Europe, Australia), including geographical, historical, economic, political, and cultural relationships.
Grade 7	- Comparative study of regions and nations of the Eastern World (Asia, Africa, USSR, Eastern Europe), including geographical, historical, economic, political, and cultural relationships.
Grade 8	- United States history, including the Constitutions of Indiana and the United States; emphasis on United States history up to the late 19th Century.

Grades 9-12 - United States history (two semesters required with emphasis on the 20th Century) and United States government (two semesters required, or one semester of United States government and one semester of a citizenship course). Required courses include study of the historical, political, civic, sociological, economic, and philosophical foundations of the Constitutions of Indiana and of the United States. Elective courses may be chosen from the social sciences, history, geography, law and citizenship.

This curriculum outline and the corresponding proficiency statements should not limit us to a narrow view of the individual, family, school, neighborhood, community, state, nation, and world. There is a need to help students at all levels understand the world as a set of interrelated systems rather than as separate and unrelated "chunks" of territory. This point has been well stated by the National Council for the Social Studies Task Force on Scope and Sequence:

> "The social studies curriculum should not move sequentially from topics that are near at hand to those that are far away for the purpose of expanding the environment. The purpose of extending content outward, away from a self-concentric focus, is to illustrate how people of different areas depend on each other; how people are a part of interlocking networks that sustain the life of modern societies...."[2]

The expanding horizons curriculum is also intended to spiral upward, as well as outward, so that topics, themes, concepts, and skills are introduced and reinforced at more complex levels across the K-12 social studies curriculum. Students in grades K-3, for example, can be provided with opportunities to interact in ways that help them to understand that individuals have both rights and responsibilities and that fair rules are needed in the classroom so that everyone has a chance to learn. While fifth graders participate in activities which help them to develop skills in cooperation and consensus building, they also develop an understanding of how the United States Constitution defines the role of government and protects individual rights. Older students examine the fundamental ideas of constitutional government in more depth as they participate in the gathering and analysis of data, engage in questioning and debate of social and political issues, make reasoned decisions, participate in civic activities and take responsibility for their actions. In this way, the social studies curriculum introduces students to the principles of constitutional democracy at increasing degrees of complexity as it provides opportunities for practice of the skills of citizenship.

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[2] Social Education (April 1984), pp. 252-253.

ABOUT THE SOCIAL STUDIES PROFICIENCY GUIDE (cont.)

In considering the range of content, skills, learner experiences, and the order in which components should be taught, it is necessary to keep both the developmental and individual needs of learners in mind. This concern is related not so much to the complexity of the topic or concept to be taught but rather to how a topic, concept, or skill is taught. In general terms, research in children's developmental stages suggests that younger children benefit from instruction that provides opportunities for concrete experience, direct observation, and actual manipulation of materials. Older children may be ready to practice dealing with cause and effect relationships and the consideration of alternative solutions to problems and their possible consequences. Students in secondary classrooms should be ready to consider more abstract and complex concepts and relationships.

In individual terms, however, each child represents a different set of prior experiences, interests, attitudes, readiness for learning, and learning style or styles. While the proficiency statements can indicate certain outcomes to serve as a guide for instructional planning, it is the classroom teacher who knows the needs of individual learners best. In order to teach effectively, teachers and school administrators must work together to manage a number of important variables:

- creating a classroom environment that encourages active participation;
- choosing and planning instructional activities and experiences;
- adapting experiences and activities to individual learning needs;
- choosing instructional strategies, approaches and materials;
- setting the pace for learning;
- relating concepts, skills, experiences, and activities to children's lives and interests;
- using a variety of means to evaluate student progress and building this information into instructional planning.

It is important to emphasize that the social studies proficiency statements are expressed in terms of learning outcomes. In other words, they address the kinds of abilities that students should be able to demonstrate at the end of an educational program. This is especially important to keep in mind as we consider the teaching and evaluation of thinking/decision-making skills and social participation. Children do not automatically learn skills of this sort unless they have had opportunities for firsthand, concrete experience at home or at school. Readiness skills in thinking and civic decision making must be taught systematically beginning in the early grades in order for children to demonstrate ability in their use at the end of an instructional program. This may mean providing background instruction in vocabulary development, simple comparisons, classification, verbal and spatial relationships, oral expression, and small group interaction and cooperation. Students should also be given the opportunity to reflect upon their own thinking approaches and strategies and how they might be different from those of others.

Evaluation of student progress in thinking, decision making, and social participation is often not easily measured by paper and pencil tests. In addition to traditional testing methods, alternatives which might be used include observation, evaluation of student products and group work, peer evaluation, and student evaluation of themselves. Information gained in this way can be used to continue the improvement of instruction.

CONCLUSION

The purpose of the Social Studies Proficiency Guide is to assist school administrators, curriculum specialists, and teachers in planning educational programs that systematically provide a climate for thinking, reasoning, and responsible social participation. The guide is intended to suggest long-term goals and objectives while it allows teachers and administrators flexibility in program planning and the opportunity to exercise their own creativity.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency,** as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling.

C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in social studies. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **social studies** proficiencies:

Foundation Proficiency Statements	030000
Specific Proficiency Statements	
Kindergarten	031000
Grade One	031001
Grade Two	031002
Grade Three	031003
Grade Four	032004
Grade Five	032005
Grade Six	032006
Grade Seven	033007
Grade Eight	033008
High School - United States History	034100
High School - United States Government	034200

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

List 030000

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge**;
B. **process information**;
C. **consider the importance of values and beliefs**;
D. **actively participate in a democratic society.**

To achieve the goal of citizenship education, students in Indiana schools will be provided learning experiences in **social studies** which allow them to:

1. assess how the people, events, and decisions of the past influence the present and future.

2. describe the geographical patterns and interrelationships of the major physical and cultural features on the earth's surface.

3. analyze past and present political structures in order to make rational choices as participating citizens in a democratic society.

4. analyze the interaction of people and institutions in economic systems.

5. investigate a range of world nations and cultures in terms of their diversity, commonalities, and interrelationships.

6. examine the patterns and interactions of individual and group behavior.

7. analyze current issues and hypothesize about their impact upon the present and the future.

8. draw conclusions or make decisions based on relevant data derived from a variety of sources.

9. develop a reasoned commitment to those civic values needed to function responsibly in a democratic society.

SOCIAL STUDIES
KINDERGARTEN LEVEL

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society**

Proficiency List 031000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the kindergarten level, students should	Students will
1. **identify different, changing, and expanding environments around them, including the school and neighborhood.**	a. name their school, classmates, and school personnel and define their roles. b. give examples of how seasonal changes affect the environment of the home, school, and neighborhood.
2. **explore the geographic relationships of home, school, and community.**	a. use terms related to location, direction, and distance to find people and things in the classroom. b. use symbols to represent objects, features or places, e.g., make faces out of paper plates, yarn, crayons; make "Me Maps" by tracing body outlines on kraft paper; make three-dimensional models with milk cartons and blocks for houses, strips of tape for streets, etc. c. use terms to describe relative size and shape of things and places, e.g., big, little, large, small; round, square, box shape, ball shape. d. identify and describe the school and places in the community by drawing pictures and naming people, places, and things; telling stories, etc. e. describe plants, animals, land and water features that are familiar. f. examine pictures of different environments to describe how they are similar and different from their own.

Specific Proficiency Statements	Sample Indicators
3. **examine the reasons why rules are needed for people in families and groups in the school.**	a. describe rules in their families. b. identify rules that exist in the classroom and school. c. give reasons for specific rules. d. identify responsible actions in themselves and others.
4. **explain how people meet basic economic needs for food.**	a. explain why all people need food, shelter, and clothing. b. describe how the family obtains food, clothing, and shelter. c. explain how people purchase the things that they need and want. d. describe the economic and other activities that family members do together.
5. **demonstrate that people have likenesses and differences and that people learn from each other in many different ways.**	a. identify types of food, shelter, and clothing used by people in different places and suggest reasons for differences. b. identify similarities and differences in families in places around the world. c. describe customs, holidays, and celebrations in their own families and nation. d. practice a custom or celebrate a holiday of another country.
6. **identify themselves as unique individuals who interact with other individuals and with many groups, including the family, school, community, nation, and the world.**	a. assess their unique qualities and select qualities of others than make them unique individuals. b. identify actions or feelings of others that are similar to or different from one's own. c. list family members and describe family relationships and roles. d. recall name and home address and state names of school, community, and nation.
7. **give examples of events that are important to them, their families, friends, and classroom.**	a. describe an event that is important to them, e.g., a new tooth, buying something new to wear, etc. b. share important family events with the class, e.g., a new pet, a new brother or sister, a relative's birthday, etc. c. describe an event that happened recently (yesterday, last week) in the classroom.

Specific Proficiency Statements	Sample Indicators
	d. anticipate events that are planned for the future (tomorrow, next week). e. participate in planning for an event by suggesting things that will be needed, tasks that will have to be done, etc.
8. manipulate a variety of means for gathering and organizing information.	a. separate time, things, events, etc. into classes or categories. b. interpret firsthand experiences by drawing and painting pictures of things, places, people, and stories. c. talk about their own pictures and listen to the ideas of others. d. practice matching and finding patterns and relationships in words, shapes, and objects. e. practice using direction and comparison words, e.g., up/down, alike/different, big/little, tall/short. f. make models of real objects from blocks, clay, construction paper, household items. g. participate in group work to identify and select alternative ways of expressing needs and interests.
9. practice citizenship skills through participation in group activities.	a. adopt accepted classroom rules to facilitate participation and sharing. b. work together to find solutions to classroom problems. c. demonstrate through participation that they recognize the feelings and needs of others. d. exercise responsibility for personal safety within the school and community environment.

SOCIAL STUDIES
GRADE ONE

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 031001

Specific Proficiency Statement	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the first grade level, students should	Students will
1. **identify different, changing, and expanding environments around them, including the school and neighborhood.**	a. identify things which have changed in their families. b. tell about the changes in their own lives. c. classify objects from pictures as "things of today" and "things of long ago." d. identify individuals of past and present significance to the community and nation. e. identify changes in the community, including new/fewer businesses, more/less people, more/less public services.
2. **explore the geographic relationships of home, school, and community.**	a. give and respond to verbal instructions involving directions, e.g., here/there, over/under, left/right, up/down. b. identify the geographic locations of their homes in relation to the school and community, e.g., name the streets crossed and followed on the route between home and school. c. make models and maps to show locations in familiar environments, e.g., classroom, school, playground. d. identify a globe as a model of the earth when matching other models with the real objects they represent. e. relate locations on maps and globes to locations on the earth, e.g., name and locate home community, nearby city, or body of water.

Specific Proficiency Statements	Sample Indicators
	f. distinguish between land and water on globes and maps. g. describe the seasons of the year and their effect on people, plants, and animals in the home, neighborhood, and community. h. describe how natural resources are used to meet people's needs and explain why people are concerned about the quality and quantity of natural resources.
3. examine the reasons why rules are needed for productive group life in the school and community.	a. identify rules that exist in the family, classroom, and school and explain their purposes. b. suggest reasons why specific individuals, e.g., teacher, aide, principal, bus driver, police officer, parent, or babysitter, have rules. c. predict the consequence of fulfilling or not fulfilling responsibility to legitimate authority. d. apply rules to different group situations, e.g., games, sports, group work, field trips. e. identify problems and suggest solutions in small group and classroom situations.
4. explain how people work and use resources to fulfill their economic wants.	a. explore the ways that people obtain shelter, food, clothing, recreation, transportation, etc. b. explore the kinds of work that school personnel and family members do and how that work benefits everyone. c. give examples of how students and families acquire money directly through work or through other means, e.g., allowances, etc. d. identify some of the ways that people spend money and suggest reasons why people save money. e. suggest reasons why it is not possible for people to have all the things that they want (**scarcity**).
5. demonstrate that people have likenesses and differences and that people learn from each other in many different ways.	a. discuss ways in which people in their families, classroom, and school are similar and different. b. draw pictures of the different types of homes in the neighborhood, e.g., one-story, two-story, apartments, tall buildings, low buildings, brick, wood. c. suggest reasons why people choose different types of housing, clothing, music, food, etc.

Specific Proficiency Statements	Sample Indicators
	d. list the different types of food that people in their families, neighborhood, and community enjoy. e. compare housing, clothing, and foods of their families and neighborhood with those in other parts of the world. f. give examples of items in their homes, classroom, and neighborhood that come from other countries. g. sing songs, play games, sample foods from other countries, and practice speaking simple words in other languages. h. describe family, community, and national holidays and celebrations. i. demonstrate a custom or practice of the past and compare and contrast with their own customs. j. demonstrate a custom or celebrate a holiday of another country.
6. identify themselves as unique individuals who interact with other individuals and with many groups, including the family, school, community, nation, and the world.	a. assess their unique qualities and those of others. b. analyze their feelings and determine how they compare to the feelings of others. c. describe how family members and friends provide for each other's needs for love and respect. d. give examples of how people in the school and neighborhood depend on each other. e. give their own names and addresses and the names of the school, community, and nation.
7. give order and sequence to events that are important to them, their families, and the school.	a. place events in their lives and in the school day in sequence. b. make contributions to class time lines dealing with the days of the week, months of the year, seasons, and special events such as birthdays and holidays. c. give examples of ways that people get information about events that are taking place or will take place, e.g., television, radio, etc. d. tell about a current event which occurred in the school or community and discuss why it occurred. e. anticipate family, classroom, and school events that are planned for the future. f. participate in planning for an event by suggesting things that will be needed, tasks that will have to be done, etc. g. work with class members to carry out planning by taking responsibility for tasks, bringing needed materials, etc.

Specific Proficiency Statements	**Sample Indicators**
8. manipulate a variety of means of gathering and organizing information.	a. separate time, things, events into classes or categories on the basis of specific criteria. b. interpret firsthand experiences by drawing and painting pictures of things, places, people, and stories. c. make maps and models of real objects and places from blocks, clay, paper, paint, and household items. d. discuss their pictures, maps, models, and compare their interpretations of information with classmates. e. explain their use of symbols to represent real things in the pictures, models, and maps that they have made. f. give examples of how symbols are used to convey information in the school and neighborhood, e.g., traffic signs, signs designating places in buildings and parks, national symbols such as the flag. g. explain why symbols are useful for conveying information.
9. practice citizenship skills through participation in group activities.	a. identify some of the rights that people have, e.g., the right to privacy and to have personal belongings. b. suggest some of the responsibilities that accompany these rights, e.g., the responsibilities of owning a pet, etc. c. differentiate between items that they do and do not own. d. adopt accepted classroom rules to facilitate participation and sharing. e. demonstrate respect for other's rights in school and classroom activities. f. work together in groups to identify problems and suggest alternatives for resolving problems and conflicts.

SOCIAL STUDIES
GRADE TWO

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 031002

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the second grade level, students should	Students will
1. **examine changes in the community.**	a. discuss changes that they have noticed in the school, including changes in teachers, students, textbooks, and activities. b. identify changes in the size, number, and uses of buildings, streets, and roads in the neighborhood and community. c. visit historic buildings in the community and describe how these buildings are different from more modern buildings. d. examine pictures and photographs of the neighborhood and community in the past and discuss differences in clothing, cars, and styles. e. identify individuals of past and present significance to the community and nation. f. imagine changes that might take place in the school and neighborhood in the future.
2. **show how their neighborhood is geographically related to other neighborhoods and the community.**	a. use the cardinal directions to locate things outdoors, in the classroom, school, and neighborhood. b. make simple maps of the school and neighborhood, using symbols to represent objects, features, or places. c. locate places in the neighborhood and outside the neighborhood on community maps. d. use symbols to identify local landforms and bodies of water.

Specific Proficiency Statements	Sample Indicators
	e. compare and contrast life in cities, towns, suburbs, and farms. f. observe and record daily changes in the weather and how plants, animals, and people respond to seasonal changes. g. locate oceans, continents, mountains, islands, and lakes on maps and globes. h. compare maps and globes and describe similarities and differences.
3. demonstrate why groups and communities have rules and laws.	a. identify the purposes of family, classroom, school, and game rules. b. identify the sources of authority for those who make laws and rules at home and in school. c. identify school and community rules and laws and tell why they are important. d. give examples of how rules and laws can be made and changed by voting. e. compose a set of classroom rules which can be voted on by the class.
4. describe how people depend on each other to supply economic goods and services.	a. identify people who provide goods and services to the community, e.g., school workers, firefighters, police officers, doctors, factory workers, storekeepers, farmers, etc. b. explore the education or training needed for a job or profession. c. give examples of how people earn income, e.g., wages, salary, rent, profit. d. explain how family members use their income. e. identify family members who are producers, consumers, and both producers and consumers. f. explain how natural and other resources are used to satisfy the economic wants of people. g. give examples of how people make choices about using goods, services, and resources. (Since resources, goods, and services are limited, people must make decisions about what they will buy, make, or do for themselves and what things they will do without.

Specific Proficiency Statements	Sample Indicators
5. illustrate how neighborhoods are made up of people of different ages and backgrounds.	a. identify people of different ages and backgrounds in their neighborhoods, e.g., people who are children, grownups, senior citizens/people who do different jobs, speak different languages, etc. b. share the culture and traditions of their families, e.g., foods, holidays, languages, family customs, etc. c. explore the culture and traditions of ethnic groups in the community through visits from community members, field trips, cultural fairs, etc. d. list ways their neighborhood is similar and different from other neighborhoods in the community, e.g., services, language, religion, ethnicity.
6. explain how family members and community members depend upon each other.	a. describe responsibilities that family members have. b. classify ways in which people depend on each other in the community, e.g., for food, water, protection, education. c. list ways family and community members depend on people outside of the community. d. show on a map how communities are linked together by modes of transportation and communication. e. compare and contrast the ways community members depend on each other in other parts of the world.
7. suggest ways that current events may influence their lives and the lives of their families.	a. give examples of ways that we get news about events, e.g., television, radio, newspaper, public announcements, etc. b. gather and organize information related to current class, school, or community problems. c. consider possible solutions to problems and the consequences of proposed solutions.
8. manipulate a variety of means for gathering and organizing information.	a. draw pictures to capture and summarize information from books, stories, interviews, field trips, and audiovisual resources. b. make simple maps of the classroom and school. c. identify symbols on maps, globes, and in the school and neighborhood environment. d. explain how symbols are useful for conveying information.

Specific Proficiency Statements	Sample Indicators
	e. make comparisons (e.g., similar, same, taller, thinner, bigger, smaller) and give descriptions of objects, places, people in the school and neighborhood. f. make "charts" by arranging actual objects according to distinguishing attributes. (EXAMPLE: A "human" chart or graph could be made by having those wearing tennis shoes stand at one end of the room while those wearing some other type of shoe stand at the other.) g. count things that they observe in the neighborhood, e.g., cars, bikes, motorcycles, and make simple graphs. h. compare their own interpretations of information with those of classmates. i. discuss the various methods that people use to get information, e.g., books, direct observation, interview, survey of other people.
9. demonstrate through participation that people in a democracy have both rights and responsibilities.	a. identify some of the rights that people have, e.g., the right to privacy and to have personal belongings, freedom of speech, freedom of religion. b. suggest some of the responsibilities that accompany these rights. c. identify school, family, and community leaders and give examples of the qualities that a leader should have. d. discuss the responsibilities, privileges, and limitations that leaders have. e. make inferences about the costs and benefits of accepting responsibility. f. suggest ways children can participate responsibly in community life. g. do a simple school survey to identify a common problem and attempt to reach a classroom consensus about a possible solution. h. participate in group work to identify, select, and defend alternative ways of meeting needs and interests.

SOCIAL STUDIES
GRADE THREE

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 031003

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the third grade level, students should	Students will
1. **explain the importance of the historical development of the community.**	a. identify significant historical developments, events, personalities, buildings, and places in the community. b. identify and discuss changes which have occurred in the community. c. predict changes in the community which may take place in the future. d. give examples of how other communities in the past or in other parts of the world have changed over time.
2. **show how the geographical location of the community relates to the state and the nation.**	a. use cardinal and intermediate directions and common map symbols. b. identify land and water forms, e.g., oceans, lakes, river systems, continents, islands, mountains. c. locate the equator, Northern Hemisphere, and Southern Hemisphere, North and South Poles. d. give examples of how climate is affected by a community's location on the globe. e. distinguish political divisions on maps and globes. f. locate their community, county, state, nation, and continent on maps and globes.

Specific Proficiency Statements	**Sample Indicators**
	g. give examples of how the community's geographic location affects the way they live, e.g., climate, clothing, housing, recreation, means of earning a living. h. consider the consequences of changes in the environment and suggest ways the environment can be improved.
3. identify the major services provided by local governments.	a. discuss the reasons why people have governments. b. identify local officials and explain their duties. c. suggest the qualities needed to fulfill the duties of a community leader or person with authority, e.g., teacher, policeman, mayor, etc. d. suggest ways that individuals can improve the quality of life in their schools, neighborhoods, and communities. e. identify and plan group projects for improving their environment. f. explain why a city government may not be able to provide all the goods and services people ask it to provide. g. identify the opportunity cost of an additional good or service.
4. explain how people make choices about using goods, services, and resources to satisfy their economic wants.	a. describe how people work in jobs to provide goods and services in the community. b. explain why people specialize in different jobs. c. identify the economic resources (natural resources, human resources, manmade resources) in the community. d. give examples of how people are both producers and consumers of goods and services. e. give examples of how economic resources in the home, school, and community are limited (scarcity) and how people must make choices about how to use resources. f. identify the opportunity cost (what you have to give up to get something you want) of various choices.

Specific Proficiency Statements	**Sample Indicators**
5. examine the contributions of various racial and ethnic groups to the development of the community and the country.	a. determine when their families came to live in the community. b. indicate on a map the places their families have lived (family maps). c. identify countries where family members may have lived in the past and consider ways they traveled to reach the United States. d. identify various racial and ethnic groups and their places of origin. e. give examples of the contributions of racial and ethnic groups, including their own groups, to the development of the community. f. consider the ways in which many different types of people help to make the community a better place to live.
6. explore the increasing similarities among groups of people as a result of trade, travel, and modern systems of communications.	a. identify the ways people communicate with one another in various parts of the world. b. compare methods of communication in the past with those of today. c. identify goods that are imported to and those exported from their community. d. give examples of ways people live in communities around the world, e.g., housing, clothing, transportation. e. compare and contrast a different community environment with their own. f. identify ways technology has helped people adapt to their environment.
7. identify significant current events that influence life in the community.	a. identify ways in which people get information about their communities and other places in the world, e.g., television, radio, newspapers. b. use these sources of information to identify important events and issues. c. explain how an event may be important to their lives. d. interview community leaders to learn how they use information about current events to make decisions. e. discuss the relationship of a current event or problem to the past. f. identify specific problems or issues in the community and propose possible solutions or outcomes.

Specific Proficiency Statements	**Sample Indicators**
8. use a variety of sources to gather information about their community and other communities around the world.	a. use different types of maps to collect data about their community, e.g., county maps, street maps, highway maps, aerial photos. b. interpret information about life in the community from simple charts, time lines, pictures, photographs. c. make simple maps and charts to describe the community. d. interview community members about life in the community now and in the past. e. identify different opinions on events and issues from television, newspaper headlines and cartoons, and other media. f. give examples of how technology helps people gather and organize information.
9. demonstrate understanding of democratic ideas through the practice of citizenship skills.	a. hypothesize about why communities need rules and laws. b. explain the difference between fair and unfair rules and laws. c. evaluate ways of dealing with problems and determine if they are fair or unfair. d. identify rules and laws in the community. e. explain why it is important to respect the rights and property of others. f. gather and analyze information about national symbols, holidays, and famous citizens. f. exercise responsibility by working together in groups to plan and carry out projects and activities.

SOCIAL STUDIES
GRADE FOUR

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 032004

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the fourth grade level, students should	Students will
1. **trace the historical movements which have led to the development of Indiana as a state.**	a. identify prehistoric and historic Indians and their contributions to Indiana. b. describe the early European exploration of Indiana. c. explain what motivated early European explorers and settlers and identify the resources they needed. d. examine the events leading to territorial status and statehood. e. describe leaders who shaped Indiana. f. develop charts and time lines identifying key events in Indiana history.
2. **demonstrate an understanding of Indiana's geographical relationship to the nation and the world.**	a. explain the relationship of the earth to the sun and its effects upon climate, natural vegetation, soils, and animal life. b. describe places in Indiana and other parts of the world in terms of their absolute (exact) and relative location (location in relationship to other places). c. estimate relative distances between places using maps and globes.

Specific Proficiency Statements	**Sample Indicators**
	d. use cardinal and intermediate directions to show how to reach specific points in the community and state and show directions on road and transportation maps.
	e. describe major types of landforms and water features, their worldwide distribution, and their relationship to the ways people live.
	f. describe the climates of major regions and their corresponding ecosystems and relate these patterns and systems to the way people live in Indiana.
	g. identify and classify natural resources, show their worldwide distribution patterns, and recognize the physical and human limits on the use of resources.
	h. describe and compare urban and rural communities in Indiana and other parts of the world and explain how these communities depend upon each other.
	i. make simple maps to show how communities in Indiana are linked together by transportation and communication systems.
	j. demonstrate how places in Indiana have changed over time.
	k. give examples of how people in Indiana have adapted to and changed the environment and how they have worked together to solve environmental problems.
3. describe the components and characteristics of Indiana's present form of government.	a. explain the origin and determine the purpose of Indiana's constitution.
	b. identify the Governor, Lt. Governor, the local State Senator, and the local State Representative.
	c. list the duties of the Governor, Lt. Governor, and the General Assembly.
	d. explain how the Governor and legislators are elected.
	e. describe the characteristics one should look for in persons running for the office of governor or legislator.
	f. explain how controversies are resolved in a democracy through the electoral process.
	g. examine the sources and uses of government revenues.
4. compare the characteristics of Indiana's economic system in the past and present and predict possible changes.	a. identify Indiana's manufactured and agricultural products.
	b. explain how Indiana's products have changed over a period of time.
	c. cite examples of economic interdependence within and among regions of Indiana.

Specific Proficiency Statements	Sample Indicators
	d. compare and contrast manufactured and agricultural products of Indiana with those of states in different regions. e. describe the importance of Indiana's products in world trade. f. examine Indiana's economic relationships to other states and regions of the United States and the world. g. examine the changes in the state's production and distribution of food. h. examine and explain the change from an agricultural to a manufacturing to a service-based Indiana economy. i. evaluate the changes in the quantity and quality of government-provided goods and services.
5. analyze the diverse cultural contributions that influence Indiana's heritage.	a. recognize that everyone has a cultural heritage and traditions. b. identify major cultural and ethnic groups in the past and the present that have contributed to Indiana's development. c. describe the histories of various cultural and ethnic groups in Indiana. d. identify important traditions of different cultural and ethnic groups in Indiana. e. explain how different cultural and ethnic groups contribute to Indiana's development. f. compare and contrast cultural groups in Indiana with those in neighboring states. g. cite things which people in different cultural groups have in common. h. explore the cultural heritage of their families.
6. examine the interaction between individual and group behavior in state and community life.	a. identify different types of social groups to which people belong. b. discuss the various ways that individuals function in groups. c. give examples of how individuals and groups influence each other. d. explain the importance of various social groups in Indiana's development. e. identify the responsibility the individual has to the state and community and the responsibility the state or community has to the individual.

Specific Proficiency Statements	**Sample Indicators**
7. examine current issues and events and their influences on daily life in Indiana communities.	a. use several sources to gather information about current issues and events. b. explain how an event or issue may be related to conditions in the past. c. imagine how the outcome of an event might influence their future lives. d. demonstrate how information about current events helps people make informed decisions. e. research the different ways people have gained information and made decisions about issues and events throughout Indiana's history. f. identify specific problems or issues in their communities and propose possible solutions or outcomes. g. apply a decision-making model to current problems by identifying alternative actions and the criteria used to evaluate those alternatives.
8. draw conclusions about past and present life in Indiana based on relevant data derived from a variety of sources.	a. use maps of different scales and themes, e.g., transportation, population, products, etc., to acquire data about Indiana. b. interpret information about life in Indiana presented in graphs, charts, time lines, pictures, and cartoons. c. construct simple maps, time lines, charts, and graphs. d. use both primary sources (documents created by people who participated in or witnessed events - diaries, letters, drawings, photographs) and secondary sources (textbooks, encyclopedia articles, etc.) to draw conclusions about Indiana life. e. identify different opinions on events and issues from documents, cartoons, television, and other media.
9. develop a commitment to democratic principles through the practice of citizenship.	a. give examples of conflicting interests, values, and beliefs throughout Indiana's development and describe the compromises which attempted to resolve them. b. give examples of how differing values and beliefs may come into conflict in a democracy. c. demonstrate democratic approaches for resolving conflicts. d. imagine problems that would result without rules, laws, and means of resolving conflicts.

Specific Proficiency Statements	**Sample Indicators**
	e. contribute to the development of classroom rules.
	f. define terms such as **majority**, **minority**, **fairness**, and **discrimination**.
	g. support individuals' rights to have differing opinions.
	h. participate in making appropriate group decisions in regard to class rules, group projects, etc.
	i. accept responsibility for group and individual decisions and actions.

SOCIAL STUDIES
GRADE FIVE

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 032005

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the fifth grade level, students should	Students will
1. **describe the historical movements which influenced the development of the United States.**	a. describe the migration of people from Asia to North America. b. identify specific Indian groups and describe their life styles before the arrival of the Europeans. c. list explorers of the New World and describe their influence upon early colonization. d. trace the events that led to the establishment of the United States. e. name major historical figures and describe their involvement in the development of the United States.
2. **identify the physical and cultural characteristics of the United States and describe their relationships to geographic regions of the world.**	a. identify symbols and use scale to measure distance on maps and globes. b. use latitude and longitude to measure distance, determine direction, and locate points on maps and globes. c. use symbols on maps and globes to identify and interpret data. d. locate specific landforms, countries, states, cities/places on maps and globes. e. hypothesize about the reasons for the locations of specific places, e.g., near a body of water, unique landform, transportation route, natural resources, source of power, etc.

Specific Proficiency Statements	**Sample Indicators**
	f. compare physical and cultural regions in North America and within the United States and explain major differences in life styles, e.g., climate, history, landforms, etc. g. give evidence that shows how regions depend upon each other and the rest of the world. h. explain ways in which personal choices and public decisions influence environmental conditions. i. evaluate the consequences of sharing boundaries with other nations, e.g., differing national aspirations, standards of living, currencies, immigration, trade, environmental problems, etc.
3. describe the components and characteristics of the United States government.	a. define **democracy**. b. trace the origin and explain the purpose of the Constitution of the United States and the Bill of Rights. c. describe the three branches of the United States government and their functions. d. propose reasons for voting and participating in the election process in order to preserve their rights and to fulfill their responsibilities as United States citizens. e. examine the election process. f. describe the responsibility of the government to its citizens and the citizens to their government. g. examine ways by which citizens may effectively voice opinions and effect change in government.
4. describe the resources and market relationships that influence the way people produce goods and services and earn a living in different parts of the United States.	a. explain how economic decisions are made in a market economy by demonstrating the relationship among factors such as price, supply, and demand. b. give evidence that shows how regions of the United States are economically connected (interdependent) with other regions. c. explain how interdependence is a result of specialization and how specialization is related to the production of goods and services. d. explain why people specialize in different careers and occupations. e. identify natural resources and occupations found in the regions of the United States.

Specific Proficiency Statements	**Sample Indicators**
	f. name different types of careers and occupations and explain how they benefit everyone. g. explore career possibilities and speculate why certain careers are more common in one region of the United States than in another.
5. analyze the diverse cultural contributions that influence the heritage of the United States.	a. identify specific cultural groups and their contributions to the United States. b. investigate the cultural heritage of specific individuals and groups. c. identify and evaluate factors which develop pride in community and country. d. compare similarities and differences of cultures in the United States with those of other countries.
6. identify and analyze groups in the United States that have influenced patterns of national behavior.	a. discuss the different kinds of social groups to which people belong. b. describe the characteristics of groups that influenced the early development of the United States. c. describe perspectives on human rights held by various groups before and after the Civil War. d. examine how groups, such as unions and political parties, have influenced the development of the United States. e. recognize that an individual has both group responsibilities and responsibility to self and that these may sometimes be in conflict.
7. examine current issues affecting daily life in the United States.	a. use several sources to gather and organize information about current issues and events. b. explore the relationship of a current issue or event to events and conditions in the past. c. project how an important current event may affect their lives. d. identify different points of view on a current issue. e. suggest possible solutions to specific problems which affect their communities. f. examine alternative methods of conflict resolution in view of the overuse of the courts. g. apply a decision-making model to a current problem or problems by identifying possible alternative actions and listing the criteria which might be used to evaluate those alternatives.

Specific Proficiency Statements	**Sample Indicators**
8. draw conclusions and make decisions based on relevant data derived from a variety of sources.	a. interpret information about life in the United States presented in graphs, charts, maps, time lines, polls, pictures, and cartoons. b. organize information in simple charts, graphs, and time lines. c. use newspaper articles, magazines, radio and television reporting and firsthand experiences (e.g., interviews, surveys) to study a problem. d. compare ways in which different media report about events, problems, and issues. e. distinguish between primary sources (documents such as diaries, letters, drawings, and photographs created by people who witnessed events) and secondary sources (textbooks, encyclopedia articles, etc.). f. role play individuals representing different interpretations of an historical event or issue.
9. develop a commitment to the democratic principles that led to the development of the United States as a nation through practice of citizenship skills in the school community.	a. explain how diverse beliefs led to the colonization of the United States. b. describe and evaluate the struggle in our society for equal opportunity for all people. c. examine the ways the Constitution and Bill of Rights protect people's rights. d. propose reasons for and justify why laws and rules are needed. e. evaluate a set of rules or laws. f. contribute to the development of class rules and government. g. work cooperatively in groups to share learning resources, examine problems/conflicts, and suggest possible solutions or compromises. g. contribute to the development of class rules and government. h. accept responsibility for group and individual actions.

SOCIAL STUDIES
GRADE SIX - GLOBAL STUDIES

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 033006

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the sixth grade level, students should	Students will
1. **evaluate the effect of historical events, figures, and decisions on world cultures.**	a. identify major historical figures from societies of the Western World and their influence in a specific culture and the world. b. outline the causes of major historical events affecting societies of the Western World and their influence on the past, present, and future of a specific culture. c. analyze a major historical decision affecting the societies of the Western World and develop probable alternative outcomes of that decision.
2. **explain the relationship between physical and cultural features on the earth's surface.**	a. hypothesize about the natural environment of places in relation to their exact (latitude and longitude) and relative locations in the Western World. b. identify the physical features (land and water forms, climate, natural vegetation, etc.) that influence cultural development in regions of the Western World. c. identify cultural characteristics of regions (language, nationality, religion, etc.) and determine the effects of cultural contact among the societies of the Western World. d. recognize the changes in the distribution patterns (population, resources, etc.) of the Western World over time.

Specific Proficiency Statements	**Sample Indicators**
	e. identify ways in which people in the Western World have used and adapted to their environments (housing, clothing, modes of transportation, etc.) f. plan hypothetical journeys which involve various methods of transportation, scheduling, time changes, directions, distances, and seasonal changes. g. identify important global issues that affect the Western World (deforestation, acid rain, population growth, etc.) and examine contrasting perspectives on these problems.
3. compare and contrast the relationship between civic responsibility and the political structures in various societies of the Western World.	a. identify major forms of government found in countries of the Western World and compare responsibilities and freedoms within each. b. construct a citizen's role within contrasting cultures of the Western World and compare it to the students' roles in their cultures. c. compare and contrast the ways in which orderly change may take place within United States culture with that of other nations of the Western World. d. describe the cultural influences that affect the political structure of a culture of the Western World from the past to the present.
4. demonstrate the influence of physical and cultural factors upon the economic systems found in countries of the Western World.	a. explain how physical geography, specialization, and trade influence the ways people earn income in various countries of the Western World. b. explore the ways different countries of the Western World answer the basic economic questions of what to produce, how to produce, and for whom to produce. c. compare and contrast how education and technology influence the economic characteristics of various countries of the Western World. d. describe the level and sources of income in the major countries of the Western World. e. explain how social institutions, such as religions, influence the economic systems of countries in the Western World. f. describe the roles of government in a market system and a planned economy found in countries of the Western World. g. identify situations in which the actions of consumers and/or producers are helpful or harmful to others (inside and outside a country) who are not directly involved in the consumption or production of a product.

Specific Proficiency Statements	**Sample Indicators**
5. develop an understanding that all cultures share common elements regardless of their diversity.	a. using cultures of the Western World, recognize the characteristics of culture that make people alike and/or different. b. using cultures of the Western World, identify the needs that influence the lives of all people. c. using cultures of the Western World, explain the relationship between cultural development and the ways people satisfy their needs and wants. d. using cultures of the Western World, recognize and evaluate forces that result in cultural change.
6. develop an understanding of the relationship between individual and group behavior.	a. using societies of the Western World, identify social groups to which people belong. b. using societies of the Western World, explain the effects of social groups on society. c. using societies of the Western World, explain the effects of individuals' behavior on society. d. using societies of the Western World, determine how individual behavior is influenced by social groups. e. using societies of the Western World, determine how social groups are influenced by the behavior of members. f. using societies of the Western World, assess what are acceptable behaviors in social groups. g. using societies of the Western World, develop an understanding of and respect for societal and individual differences.
7. determine those factors from past and current events that may influence future conditions in various cultures of the Western World.	a. research and evaluate a current issue that affects societies of the Western World. b. analyze the relationship between a current issue affecting societies of the Western World and the local, national, and international community. c. evaluate proposed solutions to a current issue affecting societies of the Western World. d. forecast hypothetical outcomes of a current issue affecting societies of the Western World. e. outline steps to reach a desired outcome for an issue affecting societies of the Western World.

Specific Proficiency Statements	**Sample Indicators**
8. using relevant data derived from a variety of sources, formulate conclusions, make decisions, and present findings related to various cultures of the Western World.	a. interpret information about societies of the Western World presented in graphs, charts, maps, time lines, polls, pictures, and cartoons. b. identify, evaluate, and utilize appropriate reference materials and data sources. c. record sources of information and develop note taking and outlining systems. d. role play or simulate individual/group behavior related to an event affecting societies of the Western World. e. prepare original written and oral reports and presentations on topics related to countries of the Western World. f. distinguish fact from opinion in data sources.
9. develop a commitment to effective and responsible participation in the functioning of school and community organizations.	a. participate responsibly in at least one service organization in the school and/or community. b. participate in at least one community service project annually. c. contribute to student government and/or class government activities. d. observe school and community rules and regulations. e. accept responsibility for group and individual actions in the school and community. f. provide positive leadership for at least one classroom activity or organization in the school and/or community.

Western World is defined as:

Western Europe
North America
South America
Australia
New Zealand

SOCIAL STUDIES
GRADE SEVEN - GLOBAL STUDIES

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 033007

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the seventh grade level, students should	Students will
1. **evaluate the effect of historical events, figures, and decisions on world cultures.**	a. identify major historical figures from societies of the Eastern world and their influence on a specific culture and the world. b. outline the causes of major historical events affecting societies of the Eastern World and their influence on the past, present, and future of a specific culture. c. analyze a major historical decision affecting the societies of the Eastern World and develop probable alternative outcomes of that decision.
2. **explain the relationship between physical and cultural features on the earth's surface.**	a. hypothesize about the natural environment of places in relation to their exact (latitude and longitude) and relative locations in the Eastern World. b. identify the physical features (land and water forms, climate, natural vegetation, etc.) that influence cultural development in the regions of the Eastern World. c. identify cultural characteristics of regions (language, nationality, religion, etc.) and determine the effects of cultural contact among the societies of the Eastern World. d. recognize the changes in the distribution patterns (population, resources, etc.) of the Eastern World.

Specific Proficiency Statements	**Sample Indicators**
	e. identify ways in which people of the Eastern World have used and adapted to their environments (housing, clothing, modes of transportation, etc.). f. plan hypothetical journeys which involve various methods of transportation, scheduling, time changes, directions, distances, and seasonal changes. g. identify important global issues that affect the Eastern World (desertification, food, population growth, energy, human rights) and examine contrasting perspectives on these problems.
3. compare and contrast the relationship between civic responsibility and the political structure in various societies of the Eastern World.	a. identify major forms of government found in countries of the Eastern World and compare responsibilities and freedoms within each. b. construct a citizen's role within contrasting cultures of the Eastern World and compare it to the students' roles in their cultures. c. compare and contrast the ways in which orderly change may take place within United States culture with that of nations in the Eastern World. d. describe the cultural influences that affect the political structure of a culture of the Eastern World from the past to the present.
4. demonstrate the influence of physical and cultural factors upon the economic systems found in countries of the Eastern World.	a. explain how physical geography, specialization, and trade influence the way people earn income in various countries of the Eastern World. b. explore the ways different countries of the Eastern World answer the basic economic questions of what to produce, how to produce, and for whom to produce. c. compare and contrast how education and technology influence the economic characteristics of various countries of the Eastern World. d. describe the level and sources of income in the major countries of the Eastern World. e. explain how social institutions, such as religions, influence the economic systems in countries of the Eastern World. f. describe the roles of government in a market system and a planned economy found in countries of the Eastern World. g. identify situations in which the actions of consumers and/or producers are helpful or harmful to others, inside and outside a country, who are not directly involved in the consumption or production of a product.

Specific Proficiency Statements	**Sample Indicators**
5. develop an understanding that all cultures share common elements regardless of their diversity.	a. using cultures of the Eastern World, recognize the characteristics of culture that make people alike and/or different. b. using cultures of the Eastern World, identify the needs that influence the lives of all people. c. using cultures of the Eastern World, explain the relationship between cultural development and the ways people satisfy their needs and wants. d. using cultures of the Eastern World, recognize and evaluate forces that result in cultural change.
6. develop an understanding of the relationship between individual and group behavior.	a. using societies of the Eastern World, identify social groups to which people belong. b. using societies of the Eastern World, explain the effects of social groups on society. c. using societies of the Eastern World, explain the effects of individuals' behavior on society. d. using societies of the Eastern World, determine how individual behavior is influenced by social groups. e. using societies of the Eastern World, determine how social groups are influenced by the behavior of members. f. using societies of the Eastern World, assess what are acceptable behaviors in social groups. g. using societies of the Eastern World, develop an understanding of and respect for societal and individual differences.
7. determine those factors from past and current events that may influence future conditions in various cultures of the Eastern World.	a. research and evaluate a current issue that affects societies of the Eastern World. b. analyze the relationship between a current issue affecting societies of the Eastern World and the local, national, and international community. c. evaluate proposed solutions to a current issue affecting societies of the Eastern World. d. forecast hypothetical outcomes of a current issue affecting societies of the Eastern World. e. outline steps to reach a desired outcome for an issue affecting societies of the Eastern World.

Specific Proficiency Statements	Sample Indicators
8. using relevant data derived from a variety of sources, formulate conclusions, make decisions, and present findings related to various cultures of the Eastern World.	a. interpret information about societies of the Eastern World presented in graphs, charts, maps, time lines, polls, pictures, and cartoons. b. identify, evaluate, and utilize appropriate reference materials and data sources. c. record sources of information and develop note taking and outlining systems. d. role play or simulate individual/group behavior related to an event affecting societies of the Eastern World. e. prepare original written and oral reports and presentations on topics related to countries of the Eastern World. f. distinguish fact from opinion in data sources.
9. develop a commitment to effective and responsible participation in the functioning of school and community organizations.	a. participate responsibly in at least one service organization in the school and/or community. b. participate in at least one community service project annually. c. contribute to student government and/or class government activities. d. observe school and community rules and regulations. e. accept responsibility for group and individual actions in the school and community. f. provide positive leadership for at least one classroom activity or organization in the school and/or community.

Eastern World is defined as:

Asia
Africa
Middle East
Pacific Rim
Eastern Europe
U.S.S.R.

SOCIAL STUDIES
GRADE 8 - UNITED STATES HISTORY

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 033008

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the eighth-grade level, students should	Students will
1. **trace and analyze chronological periods in the development of the United States.**	a. identify and describe the geographical features and major cultures of the Pre-Columbian Period, e.g., North American geography, major Native American groups and their cultures. b. identify and examine the contributions of Native American societies and cultures throughout the development of the United States. c. explain the motivating factors leading to European discovery of the Americas and the major voyages of exploration. d. describe the Hispanic role and influence on the colonization of the Americas. e. describe and assess the major events of the Colonial Period including the characteristics of the New England, Middle, and Southern colonies. f. identify and trace the economic, political, and social forces leading to colonial demands for independence and the Revolutionary War, e.g., taxation/representation, mercantilism, loyalty, geography, nationalism. g. determine the characteristics of the new nation under the Articles of Confederation and describe events and factors in the development of the United States Constitution.

Specific Proficiency Statements	**Sample Indicators**
	h. trace and assess events of the Early Republic and Nationalist Period, including the development of the Northwest Territory and Indiana as a state, the Louisiana Purchase, Monroe Doctrine, War of 1812, Jacksonian Era, the rise of sectionalism. i. summarize the underlying factors leading to the Civil War, trace the major events of the conflict, and examine the policies and impact of Reconstruction. j. analyze the events and forces leading to the expansion west of the Mississippi River and the concept of Manifest Destiny.
2. examine the relationships and significance of themes and/or concepts in United States history.	a. trace and assess the role and influence of religion in the American experience, e.g., a rationale for early colonization, the Great Awakening, religious background of past and contemporary reform movements. b. identify and appraise the economic, social, and political issues involved in dissent and reform throughout United States history, e.g., antislavery, civil rights, antiwar movements, labor movements, women's rights, environment, nuclear issues. c. examine the role of various immigrant and non-immigrant groups in the development of a pluralistic society. d. explain the reasons for and analyze the impact of significant technological innovations in United States history, e.g., cotton gin, interchangeable parts, barbed wire, mass production, electrification, atomic energy, computers. e. evaluate the role of capitalism in the economic development of the United States, e.g., the role of entrepreneurs, private property, self-interest, individual stock ownership, labor-management interaction. f. survey and appraise the role of leadership throughout the course of United States history, e.g., political leaders, economic innovators, social reformers. g. examine and critique examples from the areas of art, music, literature, and drama as they influenced and mirrored American society.

Specific Proficiency Statements	Sample Indicators
	h. assess the roles of various ethnic and racial groups in United States history, e.g., Northern Europeans, Southern Europeans, Hispanics, Blacks, Asians, Native Americans. i. explain and assess the importance of conflict and compromise in United States history, e.g., Loyalists vs. Patriots, Missouri Compromise. j. examine and explain the impact of geopolitics and the role of the United States in world affairs, e.g., Monroe Doctrine, retention of strategic world areas and resources, political decisions based on economic and defense issues. k. examine the role of values, morals, and ethics in a changing society. l. explain and evaluate examples of domestic and international interdependence throughout United States history, e.g., triangular trade routes, exchange of resources, multinational trade. m. examine and evaluate the debate over the role of the government in the economy.
3. demonstrate the use of the time dimension in history, including sequence, cause and effect, and perspective.	a. list and sequence a variety of historical events. b. formulate and determine a cause and effect relationship among historical events, themes, and concepts in United States history. c. examine and analyze various points of view relating to historical events.
4. read, observe, gather, organize, analyze, and apply information from a variety of sources as they investigate problems and issues in United States history.	a. identify, evaluate, and utilize appropriate reference materials and data sources. b. read and observe to predict, to seek answers, and to analyze points of view. c. record sources of information and develop note taking and outlining systems. d. role play individuals in historical situations. e. examine, interpret, and apply information from polls, tables, graphs, and charts. f. prepare original written and oral reports and presentations. g. work cooperatively to prepare reports and presentations.

Specific Proficiency Statements	**Sample Indicators**
5. identify, describe, and evaluate the influence of geographic factors on national development.	a. interpret and apply information from maps and globes. b. analyze geographic factors which influenced migrations and settlement patterns. c. analyze the geographic factors that have influenced social and economic development in a global context.
6. identify, analyze, and apply historical situations to current issues.	a. compare and contrast an historical incident with a current situation. b. demonstrate awareness of significant current events. c. apply historical background to problem-solving activities related to current issues and events.
7. describe and demonstrate the rights and responsibilities of citizens in a democratic society.	a. examine the types of functions that government has in people's lives. b. compare and contrast various types of governments, e.g., monarchy, dictatorship, democracy, constitutional democracy. c. explain and illustrate the characteristics of a democratic society. d. analyze the relationship between rights and responsibilities in a democratic society. e. examine the fundamental ideas which led to the development of the United States Constitution, e.g., legitimate authority is derived from the consent of the governed, the need for balance between individual rights and the rights of the government, representative government. f. outline the major provisions of the United States Constitution, e.g., separation of powers, systems of checks and balances, Bill of Rights.

UNITED STATES HISTORY
HIGH SCHOOL LEVEL

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 034100

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities leading to the development of thinking and decision-making skills at the high school level, students should	Students will
1. **trace and analyze chronological periods in the development of the United States.**	a. summarize and outline major periods and events in United States history prior to the 19th Century. b. examine the events and forces of the trans-Mississippian expansion and the concept of Manifest Destiny. c. trace the factors involved in the transition from an agrarian to an industrial nation and the impact of immigration on the American society between 1865 and 1900, e.g., transportation networks, rise of corporations and labor, urbanization, emergence of a multicultural society, growth of Indiana as a state. d. review the major events in the rise of the United States as a world power and summarize its role in World War I. e. describe the characteristics and impact of agrarian reform and the progressive movement. f. identify and explain the interrelated social and economic forces associated with the eras of prosperity, depression, and the New Deal. g. outline the events leading to the entry and participation of the United States in World War II and the development of United States/Soviet tensions in the Cold War.

Specific Proficiency Statements	**Sample Indicators**
	h. examine the political, social, economic, and technological transformation of United States society during the post-war period, e.g., changing roles of women, Blacks, Hispanics, and other minorities; prosperity and abundance; unemployment; inflation; economic growth; baby boom; television. i. identify and explain the significance of the events of the 1960's and 1970's, including the Civil Rights Movement, the Vietnam War, Watergate, and the Carter years. j. describe and assess the impact of domestic and international policies introduced since 1980, e.g., revitalization of military spending, reduced social spending, increased international tensions, impact of international terrorism. k. examine the impact of the transition from an industrial to an information society. l. hypothesize about future trends and their impact on our lives.
2. examine the relationships and significance of themes and/or concepts in United States history.	a. identify and appraise the economic, social, and political issues involved in dissent and reform throughout United States history, e.g., abolitionist and civil rights movements; anti-war movements, labor movement, gender equity, environmental issues, nuclear issues. b. examine the roles of various immigrant groups in the development of a pluralistic society. c. explain the reasons for and analyze the impact of significant technological innovations in United States history, e.g., cotton gin, interchangeable parts, barbed wire, mass production, electrification, atomic energy, computers. d. evaluate the role of capitalism in the economic development of the United States, e.g., the role of entrepreneurs, private property, self-interest, individual stock ownership, labor-management interaction. e. survey and appraise the role of leadership throughout the course of United States history (political leadership, economic innovators, social reformers). f. examine and critique examples from the areas of art, music, literature, and drama as they influenced and mirrored American society.

Specific Proficiency Statements	**Sample Indicators**
	g. examine various ethnic and racial groups and assess their roles in contemporary United States history, e.g., Native Americans, Hispanics, Black and Asian Americans.
	h. explain and assess the importance of conflict and compromise in United States history, e.g., Philippine annexation, League of Nations, United Nations, Civil Rights, Vietnam.
	i. explore the relationships between social change and 20th Century interpretations of constitutional rights, e.g., Supreme Court decisions such as Brown vs. The Board of Education of Topeka, Kansas - 1954, Miranda, etc.
	j. examine and explain the impact of geopolitics and the role of the United States in world affairs, e.g., Monroe Doctrine, Panama Canal, retention of strategic world areas and resources, political decisions based on economic and defense issues.
	k. identify and trace intellectual developments in United States history, e.g., Social Darwinism, Puritanism, Transcendentalism; the development of psychology, sociology, and economics as sciences.
	l. explain and evaluate the role of values, morals, and ethics in a changing society, e.g., Judeo-Christian influence, Puritan work ethic, religious/ethical influence in reform movements, rise of fundamentalism.
	m. examine and evaluate examples of domestic and international interdependence throughout United States history, e.g., triangular trade routes, exchange of resources, multinational corporations.
	n. examine and evaluate the debate over the role of the government in the economy.
3. demonstrate the use of the time dimension in history, including sequence, cause and effect, and perspective.	a. list and sequence a variety of historical events.
	b. formulate and determine a cause and effect relationship among historical events, themes, and concepts in United States history.
	c. examine and evaluate a variety of diverse viewpoints relating to historical events, theories, and concepts.

Specific Proficiency Statements	**Sample Indicators**
4. read, gather, observe, and organize information from a variety of primary and secondary resources.	a. identify and use appropriate reference materials and data sources. b. read and observe to predict, to seek answers, and to analyze points of view. c. record sources of information and develop note taking and outlining systems. d. evaluate sources of information. e. role play individuals, e.g., delegates to the Constitutional Convention, in decision-making situations.
5. describe the geographical patterns and interrelationships of major physical and cultural features as they relate to the historical development of the United States.	a. identify, describe, and evaluate the influence of geographical factors on national and state development in a variety of historical eras. b. identify, interpret, and use information from maps and globes in historical inquiry activities.
6. critically analyze information in order to develop, consider, and evaluate alternatives.	a. identify and interpret basic premises and alternatives. b. identify and interpret cause and effect relationships. c. distinguish fact from opinion and judge the integrity of sources. d. compare, contrast, and classify to recognize similarities. e. recognize and judge bias, emotion, and motivation. f. examine the impact of values, attitudes, and beliefs.
7. draw conclusions, make decisions, design presentations, take action, evaluate actions, and modify the decision if necessary.	a. prepare original written and oral reports and presentations. b. work cooperatively to prepare reports and presentations. c. substantiate ideas using gathered data and logic. d. use quotations and cite sources. e. demonstrate their creativity within the structures of standard form and grammar. f. role play or simulate events in history related to problem solving and decision making.

Specific Proficiency Statements	Sample Indicators
8. identify, analyze, and relate historical situations to current issues.	a. demonstrate awareness of significant current events. b. use a variety of sources to gain information about current events. c. compare and contrast an historical incident with current situations. d. use historical evidence to evaluate proposed solutions to current problems.
9. describe and demonstrate the rights and responsibilities of citizens in a democratic society.	a. examine the fundamental principles which serve as the basis of our democratic form of government, e.g., natural rights philosophy, republicanism, constitutionalism. b. explain and illustrate the characteristics of a democratic society. c. analyze the relationship between citizens' rights and responsibilities. d. demonstrate the ways that conflicts are resolved and laws are made, changed, and interpreted. e. role play or simulate civic decision-making activities, e.g., town council meeting, congressional hearings, mock trials. f. participate in civic decision-making and problem-solving activities in the school and community setting, e.g., student government; cooperative learning activities in which students assist and work with peers; voting in local, state, and national elections when eligible; volunteer work for civic and community organizations.

UNITED STATES GOVERNMENT
HIGH SCHOOL LEVEL

The goal of social studies education is the development of **responsible citizenship** based upon thinking and decision-making skills which allow students to:

A. **gain knowledge;**
B. **process information;**
C. **consider the importance of values and beliefs;**
D. **actively participate in a democratic society.**

Proficiency List 034200

Specific Proficiency Statements	Sample Indicators
Through learning opportunities leading to the development of thinking and decision-making skills in **United States Government** at the high school level, students should	Students will
1. **trace the origins of political philosophies and their evolution into contemporary political and legal forms.**	a. trace the origins and development of the concept of law. b. trace the development of democracy from ancient beginnings. c. distinguish between democratic and authoritarian systems of government. d. recognize how the use of the social contract has been important for the guarantee of natural rights. e. compare and contrast current forms of governments. f. explain the geographic distribution of various forms of government.
2. **analyze political behavior in terms of resources, techniques, and accommodation.**	a. explain the voting procedure. b. describe the development, structure, and function of political parties at federal, state, and local levels. c. analyze and evaluate past and present political conflict. d. appraise the responsibilities and rights of citizenship.

Specific Proficiency Statements	**Sample Indicators**
3. characterize the nature, location, and extent of political power and authority.	a. analyze the forces that resulted in the writing and ratification of the Constitution. b. describe separation of powers, the resulting checks and balances, and relationships among the three branches of government. c. determine how federalism describes the relationships between states and the central government. d. identify and characterize the constitutional provisions that limit the power and authority of government. e. appraise the changing scope of federal power and authority. f. describe the ways the Constitution has changed through the amendment process and other procedures.
4. characterize the constitutional structure and processes of the legislative branch of government at the national, state (Indiana), and local levels.	a. describe the structure and organization of national, state (Indiana), and local legislative bodies. b. characterize the recruitment and role of legislators at national, state (Indiana), and local levels. c. distinguish among the enumerated, implied, and denied powers of Congress. d. describe the steps by which a bill becomes a law on the national and state levels. e. appraise the importance of the investigative and oversight powers of legislative bodies on national and state levels. f. judge the impact of special interest groups on the legislative process.
5. characterize the constitutional structure and processes of the executive branch of government at the national, state (Indiana), and local levels.	a. characterize the powers of the executive on the national, state (Indiana), and local levels. b. assess the role of administrative and regulatory agencies within the executive branches of the national and state (Indiana) levels of government. c. characterize the recruitment and role of the executive at the national, (state) Indiana, and local levels.
6. characterize the constitutional structure and processes of the judicial branch of government at the national, state (Indiana), and local levels.	a. characterize the powers of federal, state (Indiana), and local judiciaries. b. characterize the recruitment and role of justices and judges at the national, state (Indiana), and local levels. c. distinguish between original and appellate jurisdictions.

Specific Proficiency Statements	**Sample Indicators**
	d. distinguish between civil and criminal law. e. determine the significance of judicial review within the context of the United States constitutional system.
7. analyze the role of government in the economy.	a. differentiate between the role played by the government in different economic systems, e.g., fascism, communism, socialism, capitalism. b. explain and evaluate the role of government in the United States economy. c. analyze the ways in which national, state (Indiana), and local government programs are funded. d. consider the costs and benefits of government programs.
8. analyze current political issues and hypothesize about their impact upon the present and the future.	a. demonstrate an awareness of candidates and issues in elections. b. analyze current legislative issues at the national, state (Indiana), and local levels. c. analyze current executive activities at the national, state (Indiana), and local levels. d. analyze current judicial cases at the national, state (Indiana), and local levels. e. interpret the impact of international events and issues on governmental decisions.
9. draw conclusions about political issues based on relevant data derived from a variety of sources.	a. describe the range of viewpoints across the political spectrum on a given issue. b. distinguish relevant and irrelevant data sources on a given issue. c. summarize arguments from opposing viewpoints on a given issue. d. support conclusions drawn with citations from specific sources of data.

Specific Proficiency Statements	**Sample Indicators**
10. demonstrate a commitment to participants as an active and responsible citizen in our democratic system of government.	a. demonstrate tolerance and respect for differences of opinion. b. show respect for classroom, school, and community rules. c. participate in the electoral process, e.g., school elections, public campaigns, voter registration, voting when eligible, etc. d. describe the power of the individual to influence political decisions through various methods of contact with decision makers.

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FINE ARTS

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INTRODUCTION

The purpose of the Fine Arts Proficiency Guide is to provide local schools with an effective tool from which local fine arts curricula can be developed. The guide is not intended to be a list of minimum competencies, but rather the identification of skills and knowledge students are to have the opportunity to acquire. Local fine arts curricula should be based on resources available within the local school or corporation. The specific proficiency statements provided in this guide are designed to represent optimal learning opportunities schools should strive to make available to all students.

It should be noted that the Theatre Arts and Creative Movement/Dance proficiencies provide valuable information for classroom, music, and art teachers who incorporate theatre arts and creative movement/dance activities into their curriculum.

Suggestions and evaluative comments from users of the Fine Arts Proficiency Guide are always welcome.

ACKNOWLEDGEMENTS

The Fine Arts Proficiency Guide was completed because of the contributions of many individuals who gave generously of their time and expertise. Special thanks is due the following committee members:

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STATEMENT OF PHILOSOPHY - ARTS EDUCATION

Arts education is education for and about the traditional and nontraditional artistic disciplines that derive from the many cultures of the world. Artistic disciplines allow students the opportunity to express themselves as a result of perceiving, identifying, describing, and analyzing the unique characteristics of each of the arts. The arts form part of the basic educational preparation of all children in Indiana. Participation in and understanding of artistic disciplines becomes a lifelong pursuit beyond formal educational institutions.

Arts education is best provided by diverse methods of inquiry and diverse forms of experience guided by professionals. Arts education must be continually evaluated for its effectiveness in preparing artists, arts consumers, and arts audiences. Arts teachers must continually inquire into philosophical, aesthetic, and pedagogical methods in order to provide the highest quality of arts education.

RATIONALE FOR ARTS EDUCATION

- Arts education provides a means for students to be artistically literate. The ability to "read" the languages of music, visual arts, theatre arts, and dance provides for the development of multiple forms of literacy.

- Arts education allows students to have access to the major sources of our culture;

- Arts education provides a means for students to discover the richness of the qualitative world we inhabit; and

- Arts education allows students to satisfy humanity's fundamental need for more than mere existence - to exercise their desire to achieve and create.

Taken in part from:

Abeles, H., C. Hoffer, and R. Klotman. Foundations of Music Education. New York: Schirmer Books, 1984.

Eisner, E. The Role of Discipline-Based Art Education in America's Schools. Los Angeles, CA: The Getty Center for Education in the Arts, 1987.

A MODEL FOR THE DEVELOPMENT OF LONG-RANGE PLANNING IN ARTS EDUCATION

Arts educators are expert planners - for rehearsals, exhibitions, concerts, plays, trips, parent meetings, budgets, inventory, lesson plans, clubs - the list is endless. In fact, arts educators are planners extraordinaire!!

Most arts teachers are so busy with their daily teaching responsibilities and short term planning needed to run their programs that little time exists for long-range planning. Yet, the lack of effective long-range planning by arts educators at all levels has contributed to serious issues all arts teachers must face. A recent briefing paper issued cooperatively by the Music Educators National Conference, the National Art Education Association, and other professional arts education associations, K-12 Arts Education in the United States: Present Context, Future Needs, suggests that:

1. It is increasingly more difficult to justify the arts as disciplines worthy of serious study to students, parents, and to the general population;
2. Students' aesthetic and educational values are determined by the mass media - to most students, the arts are not something to learn, but something to be enjoyed under all conditions;
3. Since many consider artistic values as not important, arts teachers are often forced to participate in and promote the contest syndrome as a matter of self-justification and even survival. If competition becomes more important than teaching the arts, the philosophical foundations for serious arts education become damaged;
4. All teachers suffer from general disrespect and lack of financial reward characteristic of the current K-12 system; and
5. Justifying the existence of a sequential arts education program requires more and more time. When it appears such efforts may be necessary, many excellent teachers become frustrated and leave the system.

Most importantly, it is the lack of time and added responsibility necessary to make a sequential arts education program successful that continues to reinforce short-term planning and a "business as usual" mentality at the expense of effective long-range planning and creating ownership among students, parents, administration, and other arts teachers. The responsibility for a sequential, curriculum-based arts education program must be shared among all affected by the program. Involving those individuals most affected by the arts program can create ownership, pride, and a sense of working together necessary for a successful, on-going program.

The **Arts Education Local Planning Process Model** (p.11) is designed to assist arts educators who desire to take initial steps toward effective long-range planning. The model is a process - it differs from traditional curriculum development models, arts advisory committees, music or theatre booster organizations, or department chairperson duties in that the responsibilities for planning are shared among those individuals most affected by the arts program. As a result, future direction is determined cooperatively, supportively, and enthusiastically by those with the most to gain from the success of the arts education program.

Step One: **Identify an In-School Planning Committee.**

As can be seen in the diagram on page 11, the membership of an In-School Planning Committee should contain representatives from many diverse groups of people with an important stake in the success of the arts program. Involving them in the long-range planning process creates a strong support and information network at all levels. A district's Fine Arts or Curriculum Coordinator (if applicable) should be represented on the planning committee to provide an important link to other building principals and corporation administration. Inviting local college or university arts faculty, representatives from local arts businesses, and other community and state arts resource persons can expand a support and information network far beyond the traditional "in-school" parameters of students and parents.

Step Two: **Gain Administrative Endorsement for Your Committee, Establish an Information Network and a Regular Meeting Schedule.**

Effective long-range planning calls for continual review of goals and objectives in addition to an information network capable of reaching the constituents of each representative on the In-School Planning Committee. The information network may consist of monthly newsletters highlighting the progress of the planning committee as well as important information about upcoming arts education activities such as concerts, plays, exhibitions, etc.

Step Three: **Create a Description of What the Ideal Arts Education Program Would be Like in Your School Five Years From Now.**

This activity should involve a series of brainstorming sessions by the entire committee. Assignments may be made to individuals with expertise in specific areas. Include at least the following:

- arts curriculum (music, visual arts, theatre arts, and dance)
- staffing
- administration and coordination of the arts education program
- course offerings
- equipment, materials, and supplies
- community support
- special projects
- inservice for staff, parents, and community members

Exhaust the possibilities from each member of the committee. Use this activity as a time to share the dreams of all involved, no matter how "off-the-wall" they may seem. The committee will have an opportunity to operationalize its "ideal" program at a later time.

Step Four: **Assess Your Existing Arts Education Program.**

Identify a means to evaluate the following:

1. Student Learning Outcomes in Music, Art, Theatre Arts, and Dance. Arts teachers may wish to evaluate the content of the current arts curriculum or test student achievement through the use of standardized or teacher-developed assessment instruments. Keeping yearly records of student progress may help in future long-range planning.

2. Administration and Coordination of the Arts Program. This assessment may include an analysis of the extent to which there exists coordination of the arts programs in the school. The purpose of this assessment is not to evaluate individuals, but rather to describe the extent of any administration or coordination of the arts program.

3. Community Support for the Arts Program. A community-wide survey or questionnaire may accomplish this step. Parents or business representatives on the In-School Planning Committee with marketing or survey expertise may assist with the design and administration of the community survey.

Summarize the results of your program assessment in a concise format easily understood by the entire planning committee. A thorough program assessment may take three to six months depending on the accessibility of student evaluation data and tabulation of the results from a community survey.

Step Five: **Identify All Existing Resources Available to Your Arts Program.**

As a committee, identify all resources that could be tapped at the local, regional, and state levels for your arts program. Include at least the following:

- existing arts staff (list areas of expertise and interest);
- performance, clinic, festival, and workshop opportunities for students at the local, regional, and state levels;
- local artists available for workshops, private instruction, etc;

- local college or university arts education resources, including staff, facilities, and opportunities to attend performances or exhibitions;
- material resources such as equipment, supplies, and media;
- resources provided by the school corporation or building budget, including any support for transportation;
- financial support from parent organizations, foundations, donations, or grants;
- support from local arts businesses - art supply store, music dealer, or members of the local business community;
- support from local media including newspapers, radio, and television;
- resources available from local arts councils and civic organizations;
- state and regional arts resources, including the Indiana Department of Education and the Indiana Arts Commission.

The identification of key resources also generates a list of individuals and organizations that may be linked to your existing information network. Resources not used immediately should still be informed of the activities of the planning committee.

Step Six: **Outline Goals and Objectives for Every Year of the 5-Year Description of Your "Ideal" Arts Program.**

Create objectives for each area identified in Step Four (student learning outcomes, administration and coordination, community support, etc.) and identify the activities that must take place each year of the next five to achieve your "ideal" program. Consider focusing on the use of existing resources identified in Step Five to accomplish program objectives.

Step Seven: **Design a Specific Work Plan for the First Year.**

This plan should include, in detail, the specific tasks, dates, resources, and individuals required to accomplish each first-year objective.

Step Eight: **Gain Administrative Endorsement for Your Long-Range Plan and Begin Implementation.**

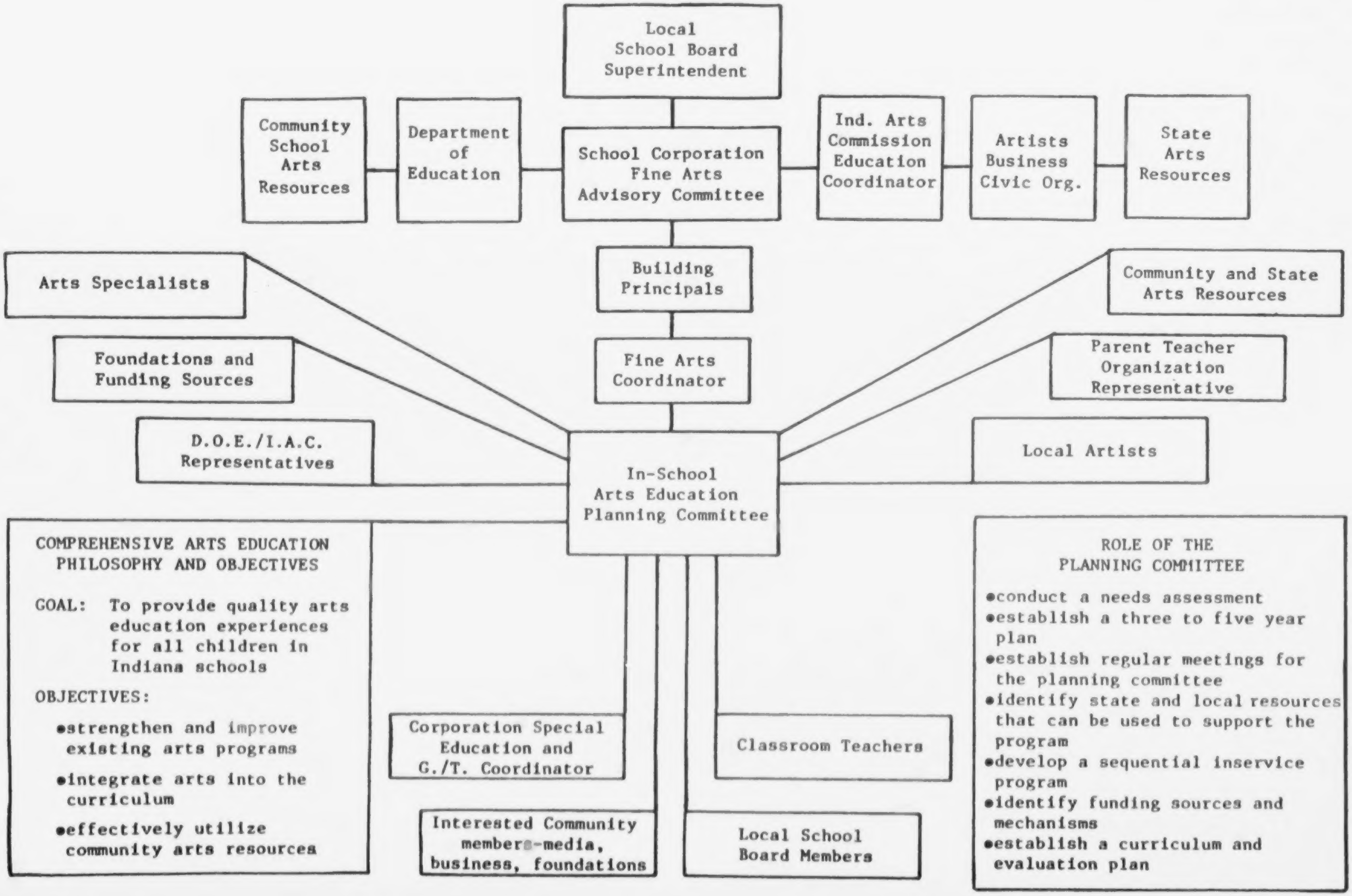
The time line necessary to accomplish the eight steps above will vary greatly from school to school. However, by sharing responsibilities among planning committee members and utilizing existing resources, most planning committees should be able to accomplish these initial steps within a single school year.

For some arts educators, the thought of sharing arts education program planning with individuals outside of the immediate school environment may be cause for hesitation. However, the opportunity exists for arts teachers to involve and **educate** those most affected by the arts program's quality, and to create the necessary ownership vital to an informed vision of a quality arts education program.

Long-range planning does take time - time spent involving and **educating** parents, students, administrators, and community - those individuals with the most to gain from a successful arts program. The ownership created through long-range planning can provide a support and information network that will assure the continued success of the arts program in the face of budget crises, changing enrollments, and increased graduation requirements. The future of arts education in Indiana will depend in part on the ability of arts educators to plan effectively for the future. Long-range planning is a means to ensure the future will be a bright one.

- Dr. Jeffrey Patchen, Arts Consultant
Indiana Department of Education

COMPREHENSIVE ARTS EDUCATION LOCAL PLANNING PROCESS


Local School Board Superintendent
Community School Arts Resources
Department of Education
School Corporation Fine Arts Advisory Committee
Ind. Arts Commission Education Coordinator
Artists Business Civic Org.
State Arts Resources
Arts Specialists
Building Principals
Community and State Arts Resources
Foundations and Funding Sources
Fine Arts Coordinator
Parent Teacher Organization Representative
D.O.E./I.A.C. Representatives
Local Artists
In-School Arts Education Planning Committee
Corporation Special Education and G./T. Coordinator
Classroom Teachers
Interested Community members-media, business, foundations
Local School Board Members

COMPREHENSIVE ARTS EDUCATION PHILOSOPHY AND OBJECTIVES

GOAL: To provide quality arts education experiences for all children in Indiana schools

OBJECTIVES:

- strengthen and improve existing arts programs
- integrate arts into the curriculum
- effectively utilize community arts resources

ROLE OF THE PLANNING COMMITTEE

- conduct a needs assessment
- establish a three to five year plan
- establish regular meetings for the planning committee
- identify state and local resources that can be used to support the program
- develop a sequential inservice program
- identify funding sources and mechanisms
- establish a curriculum and evaluation plan

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency**, as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling.

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C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in the fine arts. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **fine arts** proficiencies:

Fine Arts Foundation Proficiency Statements	090000
Music	
Foundation Proficiency Statements	090100
Specific Proficiency Statements	
General Music	
Kindergarten/Primary	091100
Upper Elementary	092100
Middle/Junior High School	093100
Senior High School	094100
Music Theory	094700
Band	
Beginning	090201
Intermediate	090202
Advanced	090203

Orchestra	
Beginning	090301
Intermediate	090302
Advanced	090303
Choral Music	
Upper Elementary	092400
Middle/Junior High and Senior High School	093400

Visual Art

Foundation Proficiency Statements	080000
Specific Proficiency Statements	
Kindergarten/Primary	081000
Upper Elementary	082000
Middle/Junior High School	083000
Senior High School	084000

Theatre Arts

Foundation Proficiency Statements	090600
Specific Proficiency Statements	
Elementary School	091600
Middle/Junior High School	093600
Senior High School	094600

Creative Movement/Dance

Foundation Proficiency Statements	090500
Specific Proficiency Statements	
Kindergarten/Primary	091500
Upper Elementary	092500
Middle/Junior High and Senior High School	093500

CODING SYSTEM (cont.)

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS - ARTS EDUCATION

List 090000

Students in Indiana schools will be provided learning experiences in **music**, **visual art**, **dance**, and **theatre** which allow them to:

1. express themselves through the arts by organizing, creating, and performing.
2. perceive, identify, describe, and analyze the distinguishing characteristics of form, structure, and style in the arts within a variety of cultural and historical contexts.
3. know the role the arts have played and continue to play in the life of man.
4. evaluate works of art based upon critical perception and analysis.
5. establish a lifelong commitment to the arts, value their importance in the life of the community, and develop the ability to continue arts education independently.

ARTS EDUCATION SKILL AREAS

DESCRIBING

The skills of:

1. Perceiving the arts and demonstrating understanding through
    a. Verbal description, including both image and technical terminology.
    b. Visual description, including diagrams and abstract drawings.
    c. Fundamental movement or expressive dance.
    d. The use of traditional and nontraditional notational schemes.
2. Interpreting the symbols characteristic of each art
    a. Translating the symbols into representations characteristic of each art (sound, movement, visual representation, expression).
    b. Verbal description, including both image and technical terminology.

ORGANIZING

Those skills related to the creation of art through organization and composition:

1. The spontaneous development of artistic ideas through improvisation as a result of the ability to effectively organize basic arts elements.
2. The communication of one's artistic intent through composition or arrangement as a result of the ability to effectively organize basic arts elements.

PRODUCING

Those skills related to the production of art:

1. Use of the body as a tool of expression.
2. Manipulation of environmental resources.
3. Use of materials specific to each art area.

EVALUATING

Those skills related to critical evaluation or judgment in the arts:

1. Perceiving and analyzing the compositional elements of works of art.
2. Analyzing the quality of works of art.
3. Establishing personal values related to works of art as they relate to the individual or group.

FOUNDATION PROFICIENCY STATEMENTS - MUSIC EDUCATION

List 090100

Students in Indiana schools will be provided learning experiences in **music education** which allow them to:

1. perform music individually and in groups, both vocally and instrumentally.
2. improvise and compose music.
3. demonstrate the use of music vocabulary and notation.
4. respond to music intellectually and emotionally.
5. become acquainted with a wide variety of world music, including diverse musical styles and genres, and become familiar with music's role in the life of man.
6. evaluate music based on critical perception and analysis.
7. establish a lifelong commitment to music, value its importance in the musical life of the community, and develop the ability to continue music learning independently.

MUSIC EDUCATION SKILL AREAS

For each instructional level and setting, the following skills should be included.

DESCRIBING

The skills of:

1. Listening to music and demonstrating understanding through
    a. Verbal description, including both image and technical terminology.
    b. Visual representation, including diagrams and abstract drawings.
    c. Fundamental movement or expressive dance.
    d. The use of traditional and nontraditional notation.

ORGANIZING

Those skills related to the creation of music through the determination of the sequence of musical sounds.

1. The communication of one's musical intent through composition or arrangement.
2. The development of musical ideas through improvisation.

PRODUCING

Those skills related to the performance of music.

1. The use of the voice.
2. The playing of instruments.
3. The use of the body as an instrument.
4. The manipulation of environmental and synthesized sound sources.

EVALUATING

Those skills related to critical evaluation or judgment in music.

1. Perceiving and analyzing the compositional elements of music.
2. Analyzing the quality of music.
3. Establishing personal musical values related to the individual or to a group.

GENERAL MUSIC

GENERAL MUSIC
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 091100

Specific Proficiency Statements

Through learning opportunities provided in **general music** at kindergarten through grade three, students should

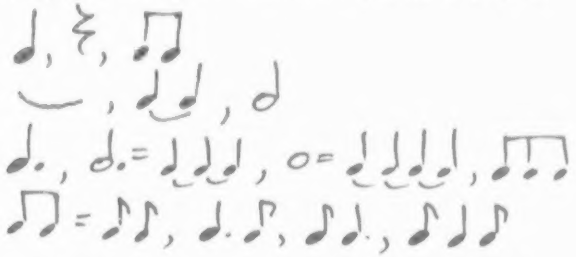
Rhythm

1. **describe, produce, organize, and evaluate rhythms, meters, and tempi emphasizing the basic beat and pulse, simple rhythmic patterns, and metric divisions of two and three.**

Sample Indicators

Students will

a. respond to the steady beat, strong beat, or melodic rhythm while listening to, singing, or playing music.
b. demonstrate a basic understanding of measures and the basic meter signatures of 2/4, 3/4, and 4/4 by such activities as clapping, walking, playing rhythm instruments, and using standard conducting patterns.
c. respond physically to music with large body movements, such as walking, running, skipping, galloping, hopping, trotting, jumping, marching, and swaying.
d. demonstrate that rhythmic patterns are even or uneven by appropriate movement.
e. recognize and create rhythmic patterns that are alike and different.
f. practice rhythmic and listening skills by participation in simple dances, games, and speech canons.
g. imitate given rhythmic patterns and ostinati utilizing body percussion, speech, singing, and/or the use of a rhythm instrument.
h. read and interpret standard rhythmic notation:



i. write basic rhythmic patterns from dictation.

Specific Proficiency Statements	**Sample Indicators**
Melody	
2. describe, produce, organize, and evaluate melody as sequential patterns of high, low, and medium sounds.	a. respond physically to discriminate between high and low pitches. b. recognize from aural or visual presentation whether the melody stays the same or moves by steps or skips and respond verbally. c. sing, play, and notate short melodic patterns, such as **sol mi, sol la, sol la sol mi**. d. demonstrate an understanding of melodic phrases as basic musical thoughts through physical response. e. improvise or compose short melodies and ostinati to perform by singing or playing. f. recognize the construction pattern for the pentatonic scale. g. recognize aurally the difference between major and minor tonalities.
Harmony	
3. describe, produce, organize, and evaluate harmony as simultaneous sounds.	a. sing with a variety of accompanimental instruments, such as the autoharp, guitar, piano, or bells. b. distinguish between unison and harmony. c. maintain a part in simple canons, partner songs, chant accompaniments, and ostinato accompaniments. d. play or improvise ostinato accompaniments using the voice, instruments, and small nonpitched percussion instruments.
Form	
4. explore the interaction of elements that comprise musical structure.	a. demonstrate aural recognition of a phrase by appropriate body movement or verbal response. b. identify similar and different rhythmic and melodic patterns through both physical movement and verbal responses. c. respond to repetition and contrast verbally or physically. d. recognize and perform music in a variety of forms, such as call and response, verse and refrain. e. respond verbally or physically to binary (AB), ternary (ABA), and theme and variation forms and relating these to visual forms.

Specific Proficiency Statements	Sample Indicators
	f. create improvisations using simple forms on pitched or nonpitched instruments. g. create and play introductions, interludes, and codas on rhythm, melody, and harmony instruments.
Expressive Elements	
5. describe, produce, organize, and evaluate the basic expressive elements in music.	a. respond to gradual or sudden changes in tempi while singing, playing, or moving. b. demonstrate in class discussion and performance an understanding that tempo is relative rather than absolute and that it often varies even within a composition according to the expressive content. c. demonstrate an understanding of relevant terminology, such as **ritard** and **accelerando** while singing, playing, and moving. d. respond to gradual and sudden changes in dynamics while singing, playing, and moving. e. demonstrate in class discussion and performance an understanding that dynamic contrasts provide a source of variety and expressive meaning in music. f. demonstrate an understanding of relevant terminology and markings for **forte**, **piano**, **crescendo**, and **diminuendo** while singing, playing, and discussing.
Timbre	
6. develop an awareness of timbre through the exploration of sounds.	a. determine the relative qualities of sound utilizing found sounds and traditional musical sounds. b. explore the various timbres of classroom instruments, such as the resonator bells, piano and other keyboard instruments, autoharp, and pitched and nonpitched percussions instruments. c. identify by sight and sound basic instruments (trumpet, violin, piano, etc.) in response to live and recorded performances. d. describe how certain instruments or voices contribute to the mood or style of a piece.

Specific Proficiency Statements	Sample Indicators
	e. discern that instruments can be played in different ways to produce various timbres, such as bowed or plucked strings, muted or open trumpet. f. combine timbres to create new effects of tone color.
Creativity	
7. create simple rhythmic, melodic, and harmonic material through the use of vocal and instrumental media.	a. respond to music through activities, such as creative movement, folk dancing, pantomime, singing games, and dramatization. b. create simple rhythmic and/or melodic chants, ostinati, and descants using vocal and instrumental media. c. create simple melodies by singing or playing resonator bells, pitched percussion, or keyboard instruments. d. create songs, additional verses to familiar songs, introductions, codas, ostinati, and accompaniments on melody and percussion instruments. e. create sound dramatizations using instruments, vocal sounds, or body percussion. f. improvise over an established rhythm pattern using the voice, nontraditional and traditional instruments, movement, or body percussion.
Listening	
8. develop aural discrimination skills.	a. respond to the rhythm of music through dance or other body movements. b. practice critical listening to self and others while singing together. c. identify simple themes, such as the Broom's theme in the **Sorcerer's Apprentice**. d. demonstrate listening skills by responding to simple musical forms. e. identify the various timbres of families of instruments. f. identify and respond physically to differences in the various styles or moods of music from a variety of cultures. g. become aware of other cultures through listening to music of other times and places. h. experience live performances and demonstrate appropriate concert behavior.

Specific Proficiency Statements	Sample Indicators
Singing	
9. sing a variety of song material with attention to pitch, dynamics, and tempo.	a. sing on pitch using a clear, natural, and relaxed singing tone. b. internalize a melody and sing on cue. c. perform a repertoire of many types of songs including: - patriotic songs - action songs - folk songs of the United States and other countries - child-created songs - songs of ethnic groups - hymns and spirituals - rounds - other interest areas, such as nature, travel, metrics, ecology, careers. d. respond expressively to the feeling, mood, and message of songs. e. participate in singing songs for dramatization, games and dances, and special occasions.
Playing Instruments	
10. play a variety of instruments.	a. use appropriate technique, playing a wide selection of the following: **percussion instruments** - various sizes of drums, timpani, bongo and conga drums, rhythm sticks, sand blocks, wood blocks, tambourines, tom-toms, claves, castanets, maracas, guiro, cymbals, gong, cowbell, Chinese temple blocks, and jingle bells. **keyboard and other melodic instruments** - pianos, organs, melodicas, resonator bells, recorders, and pitched percussion instruments, such as glockenspiels, xylophones, metallophones, and bells. **stringed instruments** - autoharps, guitars, baritone and/or soprano ukeleles.

Specific Proficiency Statements

Sample Indicators

b. demonstrate an understanding of various timbres by selecting appropriate accompanying instruments for a song.
c. play simple rhythm patterns, ostinati, and echo rhythms by ear and from notation.
d. play simple melodies by ear and from notation.
e. create simple rhythmic and melodic patterns in appropriate styles using a variety of instruments.

GENERAL MUSIC
UPPER ELEMENTARY LEVEL

Proficiency List 092100

Specific Proficiency Statements

Through learning opportunities provided in **general music** at the upper elementary level, students should

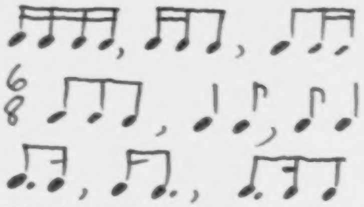
Rhythm

1. **demonstrate an increased ability to describe, produce, organize, and evaluate rhythms, meters and tempi emphasizing steady beat and pulse, rhythmic patterns, and metric divisions.**

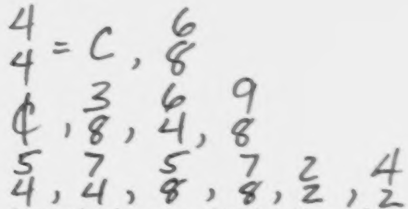
Sample Indicators

Students will

a. play the steady beat while singing.
b. play, clap, or step the steady beat, strong beat, or melodic rhythm, or any combination of the three simultaneously while listening to songs.
c. read and interpret standard rhythmic notation, such as:



d. write increasingly more complex rhythm patterns from dictation.
e. conduct meter signatures using standard conducting patterns of 2, 3, and 4.
f. interpret various meters through physical response, such as:



g. demonstrate an understanding of rhythmic patterns including syncopation by imitating such patterns vocally or instrumentally.
h. demonstrate an understanding of polyrhythms through the use of rhythm or melody instruments, patschen, clapping, and body percussion.
i. create and write original rhythmic patterns using rhythmic notation (either standard notation or an original system).

Specific Proficiency Statements	Sample Indicators
Melody	
2. demonstrate an increased ability to describe, produce, organize, and evaluate melodic elements.	a. recognize from aural and visual presentation whether the melody stays the same, moves higher or lower, or moves by steps or skips and demonstrate these concepts through physical movement. b. recognize a melodic sequence or repeated pattern, aurally or visually. c. improvise and/or compose (with and without notation) melodies to perform for the class. d. recognize and sing or play intervals. e. play simple written or aurally dictated tonal patterns, chants, descants, and songs on melody instruments. f. recognize the construction pattern of scales, e.g., - extended pentatonic scale - major scales - minor, whole tone (six tone) and twelve tone scales g. demonstrate an understanding of key centers by playing or singing the tonic and the starting tone of selected songs in several major and minor keys. h. recognize visually and aurally key changes within a song. i. demonstrate an understanding of lines and spaces in the treble clef by playing written melodies on melody instruments.
Harmony	
3. recognize chordal movement and direction using a variety of listening, performance, and compositional activities.	a. sing rounds, descants, ostinati, part songs, partner songs, canons, and do simple vocal chording. b. identify the chord changes in simple harmonic accompaniments by appropriate response, such as playing classroom instruments. c. play by ear appropriate chords on the autoharp for song accompaniments. d. create by ear simple harmonic accompaniments using the voice, melody, or harmony instruments. e. demonstrate an awareness of the expressive qualities of consonance and dissonance through listening, performing, and composing experiences and in verbal discussion.

Specific Proficiency Statements	**Sample Indicators**
	f. discuss the similarities and differences between homophony and polyphony. g. demonstrate the concept of transposition by playing the same song in different keys on the autoharp, resonator bells, stringed or keyboard instruments, synthesizer, or through composition.
Form	
4. explore and identify increasingly more complex musical forms.	a. demonstrate an increased understanding of form as related to repetition, similarity, and contrast. b. identify like or unlike phrases aurally, visually, and physically. c. identify binary (AB), ternary (ABA), rondo (ABACADA...), and theme and variation forms. d. identify and define more complex musical structures and designs, such as suite, sonata-allegro, coda, interlude, canon, opera, oratorio, symphony, cantata, art song, fugue.
Expressive Elements	
5. describe, produce, organize, and evaluate the expressive elements in music.	a. respond to gradual or sudden changes in tempi while singing, playing, or moving. b. demonstrate an increased understanding of relevant terminology, such as **ritard**, **accelerando**, **andante**, **presto**, **largo**, **allegro**, and **fermata** while singing, playing, or moving. c. discuss the relationship of tempo to form, e.g., **ritard** may imply cadence or climax; **accelerando** may create excitement and imply a cadence. d. respond to gradual and sudden changes in dynamics while singing, playing, or moving. e. demonstrate an increased understanding of relevant terminology and signs, such as **p**, **mf**, **f**, **sforzando**, **crescendo**, **diminuendo**, **staccato** and **legato**, while singing and playing. f. demonstrate the relationship between dynamics and melody (melodic contour) while singing and playing e.g., there is a natural crescendo as the melody ascends. g. demonstrate through discussion and performance an increased understanding of dynamic contrasts as a source of variety and expressive meaning in music.

Specific Proficiency Statements	Sample Indicators
Timbre	
6. explore and identify specific categories of sound and specific instrumental families.	a. explore the quality of sound of the speaking and singing voice (identify **soprano, alto, tenor, bass, changed** and **unchanged** voices). b. explore the timbres of various classroom instruments, such as resonator bells, piano and other keyboard instruments, autoharp, and pitched and nonpitched percussion instruments. c. identify by sight and sound stringed, woodwind, brass, and percussion instruments in response to solo and section performance. d. describe how certain instruments or voices contribute to the mood and style of a piece. e. experiment with instruments that can be played differently in order to produce various timbres, e.g., violins may be bowed or plucked and trumpets may be played open or muted. f. explore the timbral concepts of electronic music and electronic sound generation/manipulation.
Creativity	
7. create rhythmic, melodic, and harmonic material utilizing vocal, instrumental, and electronic media.	a. respond to music through activities, such as creative movement, folk dance, pantomime, singing games, and dramatization. b. create songs, introductions, interludes, codas, chants, descants, ostinati, and additional verses to familiar songs. c. create increasingly more complex rhythmic and/or melodic chants, ostinati, and descants through voice, instrumental, and electronic media. d. improvise, create, and notate rhythmic and tonal patterns. e. create instrumental, vocal, and electronic accompaniments for songs. f. create backgrounds for poetry and choral speaking using instruments, synthesizer, record player, tape recorder, and other electronic equipment. g. write "program notes" including information about the composer, the form, history of the composition, and human interest anecdotes.

Specific Proficiency Statements	Sample Indicators
	h. explore special areas tailored to student interest, such as: - science of sound - drama in music - ecology - making instruments - noise pollution - how a piano works inside - pop hits - sound recording and reproduction equipment - synthesizers - computers and music i. assist in planning musical programs. j. help evaluate their own progress and make suggestions for improvements.
Listening	
8. continue to develop aural discrimination skills.	a. demonstrate an increased ability to listen to music by responding to musical elements as identified by the teacher. b. practice increasingly sophisticated listening skills in group singing. c. identify the various tone colors or timbres of voices, social and orchestral instruments, and electronic media. d. identify differences in the various styles or moods of music from a variety of cultures. e. expand knowledge of other cultures through listening to music of other times and places. f. critique the quality of music and musical groups heard based on criteria developed in class.
Singing	
9. sing a wide variety of song material with attention to pitch, dynamics, tempo, and expression.	a. sing on pitch using a clear, natural, and relaxed singing tone. b. demonstrate proper breath support and vocal technique. c. demonstrate proper intonation and balance in part singing.

Specific Proficiency Statements | **Sample Indicators**

d. explore song literature, such as:
   - songs of the United States and other countries
   - child-created songs
   - songs with foreign language texts
   - hymns and spirituals
   - rounds
   - songs that reflect a specific group or occupation
   - solo-chorus songs
   - descants
   - songs in two and three parts
   - holiday songs

e. respond expressively to the mood and message of a song.

f. participate in singing songs for dramatization, games and dances, and special occasions.

g. demonstrate sight reading skills and ear training development by singing and working with charts and textbooks.

Playing Instruments

10. play a variety of instruments.

a. using proper technique play a wide variety of the following instruments

Percussion - various sizes of drums, timpani, bongo, and conga drums, rhythm sticks, sand blocks, wood blocks, tambourines, tom-toms, claves, castanets, maracas, guiro, cymbals, gong, cowbell, Chinese temple blocks, and jingle bells

Keyboard and other melody instruments - pianos, electronic keyboards, melodicas, resonator bells, recorders, and pitched percussion, such as glockenspiels,

Stringed instruments - autoharps, guitars, baritone and/or soprano ukuleles

b. demonstrate an increased understanding of various timbres by selecting appropriate accompanying instruments for a song.

Specific Proficiency Statements	Sample Indicators
	c. play by ear and sight ostinati, descants, introductions, codas, and accompaniments on percussion, melody, stringed, and keyboard instruments. d. play in an ensemble using classroom instruments and/or instruments requiring special training, such as band or orchestral instruments. e. demonstrate sight reading skills by playing percussion, melody, stringed, or keyboard instruments. f. play harmony instruments using the I, IV, and V chords in several major and minor keys.

GENERAL MUSIC
MIDDLE/JUNIOR HIGH SCHOOL LEVELS

Proficiency List 093100

The traditional scheduling format for the middle school/junior high school is different from that of the elementary school and requires a different approach and format for general music.

The general music proficiencies suggested for grades 4-6 **should continue to serve as music objectives for the general music class in grades 7-8** (and grade 6 if part of a middle school).

However, students at this level are enrolled typically in a music course which meets during a given period for a specified amount of time. This format offers opportunities for a variety of organizational strategies for music courses.

ORGANIZATIONAL STRATEGIES FOR GENERAL MUSIC GRADES 7-8 (and GRADE 6 if part of Middle School)

Organizational strategies may include:

1. HISTORICAL PERIODS

Baroque
Classical
Romantic
Twentieth Century

For each period, the following should be considered within the framework of performing, listening, analyzing, and creating:

- Time frame and historical context
- Musical styles
- Principal genres and forms
- Related arts

2. MUSIC FROM THE UNITED STATES AND OTHER CULTURES

For each topic, the following should be considered within the framework of performing, listening, analyzing, and creating:

- Historical perspective
- Musical styles
- Musical genres and forms
- Representative instruments
- Major composers and representative works and/or prominent performers
- Related arts

Sample Topics:

- History and development of rock and other popular music styles
- Folk music from the United States and its origins
- History and development of jazz
- Music of Africa
- Music of Latin America
- Music of the Orient

3. MODULES TO DEVELOP PLAYING SKILLS

A modular concept may be utilized to focus on the development of playing skills for keyboard, guitar, recorder, ukulele, or other instruments.

Playing Skills:

For the instrument selected, the student should demonstrate the playing skills appropriate to the level of instruction.

Indicators:

- read standard notation appropriate to the instrument studied
- identify parts of the instrument
- demonstrate appropriate tone production
- develop technical facility appropriate to the level of instruction
- listen to standard repertoire for the instrument studied
- demonstrate a limited playing repertoire

4. ELECTRONIC MUSIC

For each topic, the following should be considered within the framework of performing, listening, analyzing, and creating:

- Historical development
- Terminology, such as **sine waves, oscillator**
- Types of electronically generated sound sources
- Compositional techniques
- Prominent composers and representative works
- Hardware available to consumers

Topics:

- Electronic music
- Sound recording and technology
- Computers and music

GENERAL MUSIC
HIGH SCHOOL LEVELS

Proficiency List 094100

A course in general music for grades 9-12 may be organized using one of several different course structures and may be designated as either **Music Appreciation** or **Music Listening** courses. These courses may be structured in one of the following ways:

1. Chronological or reverse chronological order.
2. Selection of great works from each historical period.
3. Specific topics such as classical music, jazz, folk music, musical theatre, and popular music.
4. Listening to a wide variety of musical works representative of a variety of genres.
5. Combining music with the study of a variety of other subjects, such as visual art, theatre arts, dance, literature. The exploration of common themes and stylistic devices may be utilized.

Regardless of the course structure selected, the following proficiencies should be achieved.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **general music** at the high school levels, students should:	Students will:
Rhythm	
1. demonstrate the ability to identify and to describe the rhythms, meters, and tempi in the listening assignments.	a. re-create specific rhythm patterns heard. b. identify appropriate meter possibilities. c. recognize changing meters and irregular meters. d. recognize syncopation.
Melody	
2. demonstrate the ability to identify and describe melodic elements in the listening assignments.	a. diagram the contours of prominent melodies or themes. b. recognize a melodic sequence. c. identify the scale upon which the melody is based, such as major, minor, chromatic, whole tone, pentatonic, or modal.

Specific Proficiency Statements	Sample Indicators
Harmony	
3. demonstrate the ability to identify and describe the harmonic elements in listening assignments.	a. identify simple chordal progressions. b. identify modulations or key changes. c. identify basic tonal organization as major, minor, modal, atonal, or serial. d. identify examples of monopnony, homophony, and polyphony.
Form	
4. demonstrate the ability to identify and describe the form or structure of the musical composition heard.	a. identify examples of repetition and contrast as well as like and unlike phrases. b. identify binary (AB), ternary (ABA), rondo, theme and variations, fugue. c. identify and define verbally musical structures, such as suite, sonata-allegro, coda, interlude, and canon. d. identify and define verbally music forms, such as opera, oratorio, symphony, concerto, cantata, and art song.
Timbre	
5. identify and describe categories of sound and specific instruments and their families in the listening assignments.	a. identify the voice classification of the vocalist(s) heard as soprano, alto, tenor, or bass. b. identify families of instruments. c. identify the prominently featured instruments heard in the composition. d. identify various techniques used to alter the traditional sound of the instruments (con sordino, pizzicato, col legno, "prepared" with nonmusical devices, etc.). e. identify electronically generated sound sources.
Style	
6. develop an understanding of musical style and become familiar with a variety of composers and works associated with each historical period.	a. recognize the genres associated with specific historical periods. b. identify basic stylistic devices employed in specific historical periods. c. identify specific instruments or groups with specific historical periods.

Specific Proficiency Statements	**Sample Indicators**
	d. identify composers related to specific historical periods. e. recognize the stylistic characteristics of a variety of composers.
Expressive Elements	
7. demonstrate the ability to identify, describe, and evaluate the expressive elements in the listening assignments.	a. identify ritardando, accelerando, crescendo, descrescendo, largo or lento, andante, moderato, allegro, presto, piano, forte, and varying gradations from the listening assignments. b. demonstrate an understanding of how tempo, mode, dynamic level, and texture/instrumentation interact to contribute to the overall expressiveness of a piece.

MUSIC THEORY

MUSIC THEORY
HIGH SCHOOL LEVEL

Proficiency List 094700

A course in Music Theory should include the elements of music for study purposes and the process of music composition. Students should be led through exercises to increase their perceptive abilities and attainment of skills which, when coupled with music performance, will enhance their general understanding of music.

Maximum time should be spent acquiring and improving listening skills which will enhance musical understanding and aesthetic involvement.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **music theory** at the high school level, students should	Students will
Rhythm (including tempo, meter, rhythmic patterns and rhythmic notation)	
1. demonstrate the ability to identify and describe the rhythms, meters, and tempi in listening assignments containing a variety of rhythmic styles.	a. listen to, identify, and describe rhythms verbally in both image and technical terminology. b. take rhythmic dictation using conventional notation. c. communicate their own rhythmic intent through composition and/or arrangement. d. develop musical ideas through rhythmic improvisation. e. produce written composition, arrangement, and/or actual improvisation. f. perceive rhythm aurally from the musical score. g. analyze rhythmic patterns, phrasing, and style aurally and from the musical score. h. analyze the quality of a given rhythm aurally and from the musical score.

Specific Proficiency Statements	**Sample Indicators**
Melody (including pitch, scales, melodic patterns and melodic notation)	
2. **demonstrate the ability to identify and describe melodic elements in listening assignments containing a variety of melodic styles.**	a. listen to, identify, and describe melodies verbally, both in image and technical terminology. b. take melodic dictation using conventional notation. c. communicate their own melodic intent through composition and/or arrangement. d. develop musical ideas through melodic improvisation. e. produce written composition, arrangement, and/or actual improvisation. f. perceive melody aurally and from the musical score. g. analyze melodic patterns, phrasing, and style aurally and from the musical score. h. analyze the quality of a given melody aurally and from the musical score.
Harmony (including texture, chords, harmonic patterns and harmonic notation)	
3. **demonstrate the ability to identify and describe the harmonic elements in listening assignments containing a variety of harmonic styles.**	a. listen to, identify, and describe harmonies verbally, both in image and technical terminology. b. take harmonic dictation using conventional notation. c. communicate their own harmonic intent through composition and/or arrangement. d. develop music ideas through harmonic improvisation. e. produce written composition, arrangement, and/or actual improvisation. f. perceive harmony aurally and from the musical score. g. analyze harmonic quality, progressions, styles, and textures aurally and from the musical score.
Timbre (including qualities of sound and the human voice)	
4. **identify, describe, and manipulate categories of sound which include instruments and voices in listening assignments which contain a variety of timbres and textures.**	a. listen to, identify, and describe timbres verbally using both image and technical terminology. b. read a musical score and verbally describe the timbral differences among instruments and/or voices used. c. communicate their own ideas of timbral control (instrumentation, voicing) through composition and/or arrangement.

Specific Proficiency Statements	**Sample Indicators**
	d. develop musical ideas through timbral control in improvisation. e. analyze the quality of timbral choices aurally and in the musical score.
Form (including small forms and large forms)	
5. demonstrate the ability to identify, describe, and manipulate form or structure of listening assignments which contain a variety of diverse styles and forms.	a. listen to, identify, and verbally describe the formal structure of the work studied in both image and technical terminology. b. read a musical score and identify the formal structure of the work studied. c. listen to, identify, and describe forms inherent in a variety of compositions and arrangements. d. analyze the quality of formal structure aurally and in the musical score.

BAND

BEGINNING BAND

Proficiency List 090201

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **beginning band**, students should	Students will
1. **develop the basic skills of tone production.**	a. demonstrate proper playing posture, proper embouchure, and correct breath support. b. perform with correct articulation. c. produce sounds in appropriate registers and at appropriate dynamic levels. d. produce sounds that are considered characteristic of the instrument.
2. **develop the basic skills of technique.**	a. understand and perform the various styles of tonguing and slurring, such as staccato, legato, attack, and release. b. understand and perform major scales and arpeggios of concert keys with no flats and sharps through four flats, and chromatic scales using the preferred fingerings for their instruments. c. perform and articulate rhythmic figures of appropriate difficulty with clarity. d. demonstrate the correct hand and body position for playing their instruments. e. (percussionists) perform with proper hand and body position: single and double strokes, long roll, five-stroke roll, and flam. f. (percussionists) demonstrate a basic knowledge of mallet percussion or keyboard instruments.
3. **develop basic intonation skills.**	a. demonstrate the procedures for tuning their instruments. b. match pitches and play a melodic line in tune. c. recognize the importance of playing a part with accurate ensemble intonation and adjusting intonation to the group.

Specific Proficiency Statements	**Sample Indicators**
4. develop basic reading skills.	a. use a systematic counting method. b. recognize and play selected rhythmic and tonal patterns as they occur in an instrumental line. c. define and apply through performance selected standard notation, dynamic and articulation markings, and musical terms. d. begin to develop sight-reading skills by playing a variety of beginning level music. e. demonstrate an understanding of the differences between simple and compound meter. f. demonstrate an understanding of meter, tempo, and simple rhythms.
5. recognize visually and aurally what is heard in performance and listening activities.	a. perform or write appropriate dictated tonal patterns using scale steps. b. identify like, unlike, and irregular phrase lengths from aural and visual examples. c. identify music as moving by steps and/or skips. d. identify the letter names of all notes in the playing range of their instruments. e. demonstrate an understanding of the relationship between whole and half steps. f. demonstrate an understanding of key signatures. g. demonstrate an understanding of enharmonic tones.
6. demonstrate an awareness of simultaneous sounds and key changes.	a. recognize the difference between unison and harmony. b. recognize key changes within a song, visually and aurally.
7. identify the basic elements of form.	a. recognize elements of a melodic line, such as motive, phrase, and cadence. b. identify like, unlike, and irregular phrase lengths from aural and visual examples. c. identify and define binary and ternary forms.
8. recognize and interpret expressive markings.	a. experiment with and explore sounds which are loud and soft. b. decide on the appropriate utilization of dynamics in familiar and unfamiliar songs.

Specific Proficiency Statements	Sample Indicators
9. explore and identify specific categories of sound and specific families of instruments.	a. recognize the characteristic timbre of standard band and orchestral instruments. b. identify and describe timbral differences within instrumental sound categories, such as brass, woodwind, string, and percussion.
10. develop basic interpretive skills.	a. demonstrate an understanding of dynamic contrasts, various articulations, and tempo changes and the variety and expression each creates in music. b. recognize phrasing in music which expresses the natural tension and release.
11. develop a basic understanding of balance and blend.	a. play to demonstrate correct balance with other students in an ensemble to achieve the desired group sound, paying attention to dynamic levels.
12. perform a variety of literature.	a. perform music of several time signatures, key signatures, styles, forms and periods. b. perform simple solo and small ensemble literature. c. experience being accompanied by piano or a part of the band.
13. develop basic skills in improvisation.	a. improvise simple rhythmic and tonal patterns by playing simple rhythms and melodies by ear within the parameters of I-V-I and/or I-IV-V-I chord progressions.
14. develop basic skills in composing and arranging.	a. demonstrate an understanding of the relationship of instruments to concert pitch by transposing simple music for the instruments to or from concert pitch.
15. respond to and develop basic skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, and 6.
16. develop basic skills in evaluation.	a. evaluate individual and group performances and rehearsals, making suggestions for improvement. b. evaluate the quality of music performed based on objective criteria developed in class.

Specific Proficiency Statements	**Sample Indicators**
17. develop skills in self-improvement.	a. recognize the value of individual practice. b. recognize the value of private instruction. c. maintain proper care of instruments. d. bring supplies to rehearsals and performances. e. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. develop an understanding of the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing performance and listening skills. b. discover that music arouses a wide range of intellectual challenges and varied feelings. c. begin to develop an understanding of music and music-related careers. d. explore music careers by listening to guest speakers and taking field trips.

INTERMEDIATE BAND

Proficiency List 090202

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **intermediate band**, students should	Students will
1. **continue to develop skills of tone production.**	a. demonstrate proper playing posture, proper embourchure, and correct breath support. b. perform with correct articulation. c. perform with correct tone production and resonance, paying particular attention to achieving the characteristic sounds for their instruments in all but the highest registers and at all dynamic levels.
2. **continue to develop skills of technique.**	a. perform a variety of attacks (including multiple articulations) and releases appropriate to different styles of music. b. perform with technical proficiency chromatic scales, arpeggios, and major scales of concert one sharp through five flats. c. perform in standard registers. d. demonstrate the correct hand and body positions for playing their instruments. e. demonstrate the preferred fingerings for their instruments including a few alternate and trill fingerings. f. (percussionists) demonstrate the most important rudiments for snare drum as well as proper playing techniques on a variety of instruments, such as chimes, timpani, bells, crash cymbals, xylophone, and bass drum.
3. **continue to develop intonation skills.**	a. demonstrate the procedures for tuning their instruments. b. understand and demonstrate control of pitch without making mechanical adjustments to the instruments. c. recognize the notes on their instruments that are inherently out of tune. d. match pitches and play a melodic line in tune. e. play a part with accurate intonation.

Specific Proficiency Statements	Sample Indicators
4. develop music reading skills.	a. use a systematic counting method. b. recognize and play at sight rhythmic and tonal patterns as they occur in an instrumental line. c. define and apply through performance standard notation, dynamic and articulation markings, and musical terms. d. develop sight-reading skills by performing a variety of music. e. demonstrate an understanding of the differences between simple and compound meters. f. demonstrate an understanding of rhythmic terminology, such as meter, accent, tempo, syncopation, and irregular meters.
5. recognize visually and aurally what is heard in performance and listening activities.	a. perform or write rhythmic and tonal patterns using scale steps and intervals found in primary chords. b. identify like, unlike, and irregular phrase lengths from aural and visual examples. c. identify arpeggios and major, minor, and chromatic scales. d. demonstrate an understanding of key center by singing and playing the tonic and starting tone of selected works in several major and minor keys. e. sing simple melodic intervals and patterns using solfege, note names, or numbers.
6. recognize simple harmonic movement and key changes.	a. recognize key changes within music, both visually and aurally. b. recognize the function of dissonance in music.
7. develop skills in the recognition of form.	a. recognize, visually and aurally, elements of a melodic line, such as motive, sequence, phrase, and cadence. b. identify and define binary and ternary forms. c. identify and define characteristics of different forms of music performed in class, such as concerto, theme and variation, fugue, rondo, and march. d. recognize elements of a composition encountered in class, such as introduction, theme, trio, and coda.
8. recognize and interpret expressive markings.	a. decide on the appropriate utilization of expressive techniques for music performed. b. demonstrate the use of appropriate expressive techniques in the music performed.

Specific Proficiency Statements	Sample Indicators
9. identify timbral changes within specific categories of sound and within specific instrumental families.	a. recognize the characteristic timbre of standard band and orchestral instruments. b. recognize the changes in timbre which occur witn the addition of mutes, change of embouchure, use of breath, or by changing implements for percussion instruments. c. demonstrate an understanding of how different tone colors are created by using different instrument combinations.
10. develop interpretive skills.	a. define and accurately perform musical symbols and abbreviations including grace notes, trills, rolls, and rudiments. b. demonstrate an understanding of dynamic contrasts, various articulations and tempo changes, and the variety and expression each creates in music. c. perform phrases musically, expressing the natural tension and release. d. demonstrate an understanding of instrumental styles and textures.
11. demonstrate an understanding of balance and blend.	a. play in correct balance with other instruments in an ensemble to achieve the desired group sound, including volume and timbre.
12. perform a variety of literature.	a. perform music of many styles, forms, and periods, such as popular, classical, jazz, electronic, and traditional. b. listen to, analyze, and perform music of other cultures. c. perform solo and ensemble literature. d. experience being accompanied by piano, small ensemble, band, or orchestra on standard solo repertoire. e. experience being part of an ensemble which accompanies a solo instrument, voice, or large vocal ensemble.
13. develop skills in improvisation.	a. improvise rhythmic and/or tonal patterns. b. improvise a simple melody or rhythmic accompaniment on a given chord progression using I, IV, and V.

Specific Proficiency Statements	**Sample Indicators**
14. develop skills in composing and arranging.	a. create and write original melodies using melodic and rhythmic notation on a given chord progression using primary chords. b. arrange/transpose music for individual instruments. c. expand their concepts of music through use of instruments, electronic media, and environmental sounds.
15. develop skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, and compound meter. b. function as a student conductor in elementary or junior high school band classes.
16. develop skills in evaluation.	a. evaluate individual and group performances and rehearsals, making suggestions for improvement.
17. develop skills in self-improvement.	a. recognize the value of individual practice and private instruction. b. maintain proper care of instruments. c. bring necessary supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. understand the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing good listening skills in music. b. discover that music arouses a wide range of intellectual challenges and emotions. c. demonstrate knowledge of performance opportunities in school and after graduation. d. demonstrate an awareness of differences in the quality of various products, such as electronic equipment, recordings, pianos, and instruments.

Specific Proficiency Statements **Sample Indicators**

e. become aware of music careers and music-related careers, as well as availability of jobs, qualifications, and necessary training or education.
f. explore music careers by listening to guest speakers and taking field trips.
g. become aware of the psychological impact and effect of music on an individual and on society through such avenues as mass media advertising.

ADVANCED BAND

Proficiency List 090203

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **advanced band**, students should	Students will
1. **continue to develop skills of tone production.**	a. demonstrate proper playing posture, proper embouchure, and correct breath support. b. perform with correct articulation. c. perform with correct tone production and resonance paying particular attention to achieving the characteristic sounds for their instruments in all but the highest register and at all dynamic levels.
2. **continue to develop technical skills.**	a. perform a variety of attacks (including multiple articulations) and releases appropriate to different styles of music. b. perform with technical proficiency: arpeggios, chromatic, major, minor, and modal scales. c. perform in the extreme (but standard) registers on their instruments. d. demonstrate proper hand and body position for their instruments. e. demonstrate the preferred fingerings for their instruments including alternate and trill fingerings. f. perform and articulate rhythmic figures with clarity. g. (percussionists) demonstrate the twenty-six rudiments for snare drums as well as proper playing techniques on a variety of percussion instruments, such as chimes, timpani, drum set, bells, xylophone, and bass drum.
3. **continue to develop intonation skills.**	a. demonstrate the procedures for tuning their instruments. b. understand and demonstrate control of pitch without making mechanical adjustments to their instruments. c. recognize the notes on their instruments that are inherently out of tune and adjust them accordingly. d. match pitches and play a melodic line in tune. e. play a part with accurate intonation and adjust to the vertical structure to produce a finely tuned chord.

Specific Proficiency Statements	Sample Indicators
4. continue to develop music reading skills.	a. use a systematic counting method.
	b. recognize and play at sight rhythmic and tonal patterns as they occur in an instrumental line.
	c. define and apply through performance standard notation, dynamic and articulation markings, and musical terms.
	d. develop sight-reading skills by performing a variety of music.
	e. demonstrate an understanding of the differences between simple and compound meters, recognizing the conducting patterns of each.
	f. demonstrate an understanding of rhythmic terminology, such as meter, accent, tempo, syncopation, and even and uneven rhythms.
5. continue to develop the ability to recognize visually and aurally what is heard in performance and in listening activities.	a. perform or write dictated rhythmic and tonal patterns from aural and visual examples.
	b. identify like, unlike, and irregular phrase lengths from aural and visual examples.
	c. identify and construct arpeggios and major, minor, chromatic, and modal scales.
	d. demonstrate an understanding of major and minor key signatures.
	e. demonstrate an understanding of key center by singing and playing the tonic and the starting tone of selected works in several major and minor keys.
	f. sing melodic intervals and patterns using solfege, note names, or numbers.
6. increase an understanding of harmonic movement, chord construction, and key changes.	a. recognize key changes with works studied, both visually and aurally.
	b. recognize the function of tonic (I), subdominant (IV), and dominant (V) chords.
	c. identify and construct I, IV, and V chords in selected key signatures.
	d. recognize the function of dissonance in music.
	e. recognize a standard blues progression, both visually and aurally.

Specific Proficiency Statements	**Sample Indicators**
7. continue to develop skills in the recognition of form.	a. visually and aurally recognize elements of a melodic line, such as motive, sequence, phrase, and cadence. b. identify and define binary and ternary forms. c. identify and define characteristics of different forms of music, such as symphony, concerto, opera, theme and variation, sonata, fugue, and rondo. d. recognize elements of a composition, such as introduction, theme, trio, and coda. e. recognize the standard march form including introduction, 1st strain, 2nd strain, break strain, trio, and last strain.
8. continue to recognize and interpret expressive markings.	a. decide on the appropriate utilization of expressive techniques for music performed. b. understand the use of vibrato as an expressive element. c. demonstrate the appropriate use of expressive markings in the music performed.
9. continue to expand the ability to identify timbral changes within specific categories of sound and within specific instrumental families.	a. recognize the characteristic timbre of standard band and orchestral instruments. b. recognize the changes in timbre which occur with the addition of mutes, change of embouchure, use of breath, or by changing implements for percussion instruments. c. demonstrate an understanding of various timbres by selecting appropriate instruments for composition and/or arrangements.
10. continue to expand interpretive skills.	a. define and accurately perform musical symbols and abbreviations, including grace notes, trills, rolls, and rudiments. b. demonstrate an understanding of dynamic contrasts, various articulations and tempo changes, and the variety and expression each creates in music. c. perform phrases musically, expressing the natural tension and release. d. demonstrate an understanding of instrumental styles and textures.

Specific Proficiency Statements	**Sample Indicators**
11. continue to expand an understanding of balance and blend.	a. play in correct balance with other instruments in an ensemble to achieve the desired group sound including volume and timbre. b. recognize the value of amplification equipment and use it correctly where it is appropriate to the style of music.
12. perform a wide variety of literature.	a. perform music of many styles, forms, and periods, such as popular, classical, jazz, and electronic. b. listen to, analyze, and perform music of other cultures. c. perform solo and small ensemble literature. d. experience being accompanied by piano, small ensemble, band, or orchestra on standard solo repertoire. e. experience being part of an ensemble which accompanies a solo instrument, voice, or large vocal ensemble.
13. continue to expand skills in improvisation.	a. improvise rhythmic and/or tonal patterns. b. improvise a melody or rhythmic accompaniment on a given chord progression.
14. continue to develop skill in composing and arranging.	a. create and write original melodies using melodic and rhythmic notation. b. create simple harmonic accompaniments for existing and original melodies. c. create and write an original composition using melodic and rhythmic notation and harmonic accompaniment. d. arrange/transpose music for a variety of instruments. e. expand their concepts of medium through the use of instruments, electronic media, and environmental sounds. f. create piano, combo, or instrumental accompaniments for songs, introductions or codas to songs, or original harmony.
15. continue to develop skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, mixed meter, irregular meter, and compound meter. b. function as student conductors in either junior or senior high school band classes, at pep assemblies, and at games.

Specific Proficiency Statements	Sample Indicators
16. continue to develop skills in evaluation.	a. evaluate individual and group performances and rehearsals, making suggestions for improvement.
17. continue to develop skills in self-improvement.	a. recognize the value of individual practice and private instruction. b. maintain proper care of instruments including basic repair such as replacing pads, adjusting springs and screws, pulling mouthpieces, and replacing drum heads and snares. c. bring necessary supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. continue to develop an understanding of the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing good listening skills in music. b. discover that music arouses a wide range of intellectual challenges and varied emotions. c. demonstrate a knowledge of performance opportunities both in school and after graduation. d. demonstrate the ability to evaluate music equipment and needs for leisure-time listening. e. demonstrate knowledge of music consumer print sources, such as **Schwann Catalog**, **Consumer Reports**, and **HiFi Stereo Review**. f. demonstrate the ability to evaluate the quality of various products, such as electronic equipment, recordings, and instruments. g. demonstrate a knowledge of comparative shopping techniques for the purchase of a quality instrument and/or equipment. h. become aware of music careers and music-related careers, availability of jobs, qualifications, and necessary training or education. i. explore music careers by listening to guest speakers and taking field trips. j. become aware of the psychological impact and effect of music on an individual and on society through such avenues as mass media.

ORCHESTRA

THE BEGINNING ORCHESTRA

Proficiency List 090301

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **beginning orchestra**, students should	Students will
1. develop the basic skills of tone production and bowing.	a. demonstrate good posture and the correct playing position while sitting or standing and at rest. b. demonstrate progress toward strong resonant tone. c. display the use of full straight strokes of the bow. d. use all parts of the bow, with emphasis on the lower third. e. cross strings with elbow and wrist moving simultaneously, maintaining an arc as close to the string as possible. f. demonstrate appropriate bowing techniques in relation to: 1) simple detache 2) staccato 3) martelé - dynamic changes - recognize changes in loudness when bowing near bridge or fingerboard - extending bow stroke and clean change of bow direction - recovery of bow after rests to either a down or up bow - maintaining constant bow speed - tie-slur - playing pizzicato while holding the bow - slurred staccato of four notes to a bow
2. develop basic skills of technique.	a. demonstrate control in going smoothly from one string to another. b. display knowledge of tie, slur, staccato, marcato, and accents and demonstrate correct attack and release. c. demonstrate the ability to play in the following keys by the end of the sixth grade: D, G, A, C, F, B-flat. d. recognize necessary adjustments in finger placement and thumb placement for accurate intonation. e. move the thumb and first finger as a unit with special care that the left hand, thumb, first finger, wrist, and forearm shift as a unit.

Specific Proficiency Statements	**Sample Indicators**
	f. use the fourth finger, if physically possible, to substitute for the open string (vln, vla). g. perform some alternate fingerings.
3. develop basic intonation skills.	a. display awareness of good intonation through consistent listening to the teacher and class members and adjust pitches accordingly. b. demonstrate recognition of whole and half steps and the ability to match tones. c. demonstrate left hand position with emphasis on pressure, placement, and angle of finger positioning the elbow well under the violin. d. demonstrate the correct placement of the thumb in relation to the first finger (violin, viola), second and third finger (cello, bass). e. tune the instrument with the least possible assistance by listening and adjusting to individual pitches (attained by the third year).
4. develop basic reading skills.	a. use a systematic counting method. b. count several measures of rest in succession. c. display an understanding of basic meters - 4/4, 3/4, 2/2, 2/4, 3/8, and 6/8. d. demonstrate an understanding of simple rhythms and the corresponding bow patterns to fit these rhythms. e. demonstrate an understanding of rhythmic terminology, such as **meter**, **tempo**, **beat**, and **syncopation**. f. recognize and play basic note values and their corresponding rests including whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth. g. recognize and produce pitches as indicated by notation and letter name in first position on all strings. h. sight read simple exercises and pieces. . i. recognize and interpret musical symbols and terms including **D.C.**, **D.S.**, **fine**, **repeat sign**, and dynamic and tempo markings. j. demonstrate ability to follow and interpret the conductor's directions.

Specific Proficiency Statements	Sample Indicators
5. recognize visually and aurally what they is heard in performance and listening activities.	a. perform or write appropriate dictated rhythmic and tonal patterns using scale steps. b. identify like, unlike, and irregular phrase lengths from aural and visual examples. c. identify music as moving by steps and/or skips. d. identify the letter names of all notes in the playing range of their instruments. e. identify octaves, fifths, and arpeggios.
6. develop an awareness of simultaneous sounds and key changes.	a. recognize the difference between unison and harmony. b. recognize visually and aurally key changes within a simple composition. c. perform simple harmonized parts in basic rhythm patterns.
7. explore the interaction of horizontal and vertical organization known as form.	a. recognize elements of a melodic line, such as motive, phrase, and cadence. b. identify like, unlike, and irregular phrase lengths from aural and visual examples. c. identify and define binary and ternary forms.
8. recognize and interpret expressive markings.	a. demonstrate and experiment with sounds which are loud and soft. b. decide on the appropriate utilization of dynamics in familiar and unfamiliar pieces.
9. explore and identify specific categories of sound and specific instrumental families.	a. recognize and identify the characteristic timbre of standard orchestral and band instruments. b. identify and describe timbral differences within instrumental sound categories.
10. develop basic interpretive skills.	a. demonstrate an understanding of dynamic contrasts, various articulations, and tempo changes as well as the variety and expression each creates in music. b. understand phrasing in music which expresses the natural tension and release. c. understand phrasing in music as it responds to musical exchange from one instrument to another.

Specific Proficiency Statements	Sample Indicators
11. develop a basic understanding of balance and blend.	a. play to demonstrate correct balance with other students in an ensemble to achieve the desired group sound paying attention to dynamics, timbre, and the style and nature of the music performed.
12. perform a variety of literature.	a. perform music of several time signatures, key signatures, styles, forms, and periods including some contemporary music. b. perform solo and small ensemble literature. c. perform a solo with piano or orchestral accompaniment.
13. develop basic skills in improvisation.	a. improvise simple rhythmic and tonal patterns by playing rhythms and melodies by ear.
14. develop basic skills in composing and arranging.	a. transpose music for instruments to or from concert pitch (transposing instruments only). b. transpose concert pitch instruments up or down a whole step on simple melodies.
15. develop basic skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, and 4. b. recognize and demonstrate conducting motions to indicate dynamics, tempo changes, ritardando, accelerando, hold, etc.
16. develop basic skills in evaluation.	a. evaluate individual and group performance and rehearsals, making suggestions for improvement. b. evaluate performances of others when participating as a listener in an audience. c. begin to exhibit musical judgment in the selection of music programs on television, radio, and in the purchase of recordings.

Specific Proficiency Statements	**Sample Indicators**
17. develop basic skills in self-improvement.	a. recognize the value of individual practice and private instruction. b. maintain proper care of instruments. c. bring supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional ensembles through field trips or guest appearances. e. recognize the advantage of seeking extra information about music through books, magazines, and records.
18. develop an understanding of the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing performance and listening skills. b. discover that music arouses a wide range of intellectual challenges and varied feelings. c. begin to develop an understanding of music and music-related careers. d. explore music careers by listening to guest speakers and taking field trips.

THE INTERMEDIATE ORCHESTRA

Proficiency List 090302

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **intermediate orchestra**, students should	Students will
1. continue to develop the basic skills of tone production and bowing.	a. demonstrate the correct physical approach to proper tone production, including proper body position and bowing control. b. demonstrate added bowing facility which would include improved tone production, such as detache in the middle, upper third, and lower third of the bow, staccato, spiccato, and martele bowings. c. demonstrate the ability to change dynamics by utilizing the bow correctly in relation to contact point, weight, and speed. d. demonstrate bowing control of the following: - slurred half notes - slurred dotted quarter and eighth notes - dotted eighth and sixteenth notes - triplets - sixteenth notes - slurred staccato notes eight on a bow e. make a recovery of a bow in rhythmic figures that use up and down bow.
2. continue to develop basic skills in technique.	a. demonstrate the use of double stops from simple to more complex. b. perform simple trills. c. demonstrate vibrato and explain its relationship to tone quality. d. display proficiency in first position finger patterns: - recognize and play major scales - D, G, A, C, F, B-flat, E, B, E-flat, A-flat (one or two octaves), with various bowings. e. demonstrate skill in shifting while playing in different positions, such as: - third position and extended position for violins and violas - third, fourth, and half positions for cellos; half, second and third position for basses

Specific Proficiency Statements	**Sample Indicators**
3. continue to develop basic intonation skills.	a. tune instruments to a separate pitch for each string and as perfect fifths in a chord.
4. continue to develop basic reading skills.	a. understand and perform chromatics. b. display a knowledge of dynamic and tempo terminology encountered in musical exercises and literature, such as **crescendo, mp, mf, andante, moderato, simile, al fine, D.S., D.C., dolce, coda.** c. demonstrate improvement in sight-reading skills. d. demonstrate an ability to follow and interpret the conductor's directions. e. understand, count, write, and play in various meters more complex rhythm patterns which involve syncopation, afterbeats, triplets, dotted eighth and sixteenth note combinations, and sixteenth notes. f. perform basic rhythm and bowing patterns in less frequently used meters, such as 6/8, 3/8, 9/8, 2/2, and 5/4. g. recognize major key signatures through five flats and five sharps.
5. continue to develop the ability to recognize visually and aurally what is heard in performance and listening activities.	a. perform or write appropriate dictated rhythmic and tonal patterns. b. perform melodic intervals and patterns on instruments. c. identify like, unlike, and irregular phrase lengths from aural and visual examples. d. recognize key changes within a piece, visually and aurally. e. recognize by sight and sound intervals of the major and minor scales. f. perform simple folk melodies by rote.
6. explore chord elements and chordal movement.	a. become acquainted with basic chord progressions and resolutions, including tonic, subdominant, and dominant chords.
7. recognize and identify basic musical forms.	a. recognize visually and aurally the elements of a melodic line, such as motive, sequence, phrase, and cadence. b. identify and define binary and ternary forms.

Specific Proficiency Statements	**Sample Indicators**
8. recognize and interpret expressive markings.	a. decide on the appropriate utilization of expressive techniques for music performed.
9. recognize and identify specific categories of sound and specific instrumental families.	a. recognize the characteristic timbre of the standard orchestral and band instruments. b. recognize the changes in timbre which result from the addition of mutes to instruments. c. recognize the changes in timbre related to the overtone series.
10. continue to develop basic interpretive skills.	a. demonstrate an understanding of a variety of dynamic contrasts, articulations, and tempo changes and the variety and expression each creates in music. b. understand phrasing in music which expresses the natural tension and release. c. demonstrate an increased perception of phrasing as it moves throughout the ensemble from instrument to instrument. d. edit bowings to accomplish the desired interpretation.
11. continue to develop an understanding of balance and blend.	a. show an increased ability to blend with the ensemble. b. demonstrate independence in part-playing.
12. perform and study literature of all musical periods.	a. perform music of many styles, forms, and periods, such as popular, classical, jazz, electronic, and traditional. b. listen to, analyze, and perform music of other cultures. c. perform solo and ensemble literature. d. perform a standard solo accompanied by piano, small ensemble, or orchestra. e. perform as part of an ensemble which accompanies a solo instrument, voice, or large vocal ensemble.
13. continue to develop basic skills in improvisation.	a. improvise rhythmic and/or tonal patterns. b. improvise a melody or rhythmic accompaniment on a given chord progression.

Specific Proficiency Statements	**Sample Indicators**
14. continue to develop skills in composing and arranging.	a. create and write original melodies using melodic and rhythmic notation on a given chord progression. b. arrange/transpose music for personal instruments. c. expand the use of medium through the use of instruments, electronic media, and environmental sounds.
15. continue to develop skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, and compound meter. b. function as student conductors in either elementary or junior high school orchestra or band classes.
16. continue to develop skills in evaluation.	a. evaluate individual and group performances and rehearsals making suggestions for improvement. b. evaluate performances of others when participating as members of an audience. c. evaluate musical compositions for strengths and weaknesses based on objective criteria developed in class.
17. continue to develop skills in self-improvement.	a. recognize the value of individual practice and private instruction. b. maintain proper care of instruments. c. bring necessary supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional ensembles through field trips or guest appearances.
18. understand the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing good listening skills in music. b. discover that music arouses a wide range of intellectual challenges and emotions. c. demonstrate a knowledge of performance opportunities in school and after graduation. d. demonstrate the ability to evaluate the quality of various products, such as electronic equipment, recordings, pianos, and other instruments.

Specific Proficiency Statements	**Sample Indicators**
	e. become aware of music careers and music-related careers, as well as availability of jobs, qualifications, and necessary training or education.
	f. explore music careers by listening to guest speakers and taking field trips.
	g. become aware of the psychological impact and effect of music on an individual and on society through such avenues as mass media advertising.

THE ADVANCED ORCHESTRA

Proficiency List 090303

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in the **advanced orchestra**, students should	Students will
1. **continue to develop skills of tone production and bowing.**	a. perform with a clear, resonant tone quality at all dynamic levels. b. perform with advanced bowing control and understanding of the most commonly used bowing techniques which are suitable to the style of the composition. c. make correct judgments regarding bowing changes which facilitate appropriate phrasing and style. d. use an appropriate vibrato.
2. **continue to develop technique.**	a. demonstrate an ability to perform in more advanced playing positions, such as: violin - all positions through seventh viola - all positions through fifth cello - all positions through sixth with an introduction to the thumb position bass - all positions through seventh with an introduction to the thumb position b. make valid judgments regarding appropriate fingerings. c. demonstrate correct shifting, both ascending and descending. d. perform by memory major and minor scales up to five sharps and five flats, and tonic arpeggios of each, in two or three octaves. e. perform and understand chromatic, modal, whole tone, and pentatonic scales. f. demonstrate an understanding of natural and artificial harmonics.
3. **continue to develop intonation skills.**	a. tune to a common A the violin, viola, or cello by fifths and the string bass by open strings, as well as by harmonics. b. match pitches and play a melodic line in tune. c. play a part with accurate intonation and adjust to the vertical structure to produce a finely tuned chord.

Specific Proficiency Statements	**Sample Indicators**
4. continue to develop reading skills.	a. recognize and play, at sight, rhythmic and tonal patterns as they occur in an instrumental line. b. define and show through performance an understanding of dynamic and articulation markings, musical terms, symbols, abbreviations, and ornaments. c. demonstrate a developing ability to transpose and read different clefs, such as: - viola (treble clef) - cello (tenor and treble clefs) d. demonstrate an understanding that dynamic contrasts, various articulations, and tempo changes provide variety and expression in music. e. recognize and demonstrate an understanding of differences in performing styles as they pertain to periods and genres of music. f. demonstrate a vocabulary of musical terms to include Italian, French, and German words (and pronunciation) used in the names of instruments, dynamics, meter, tempo, rhythm, and stylistic markings. g. recognize and utilize compound, changing, and unusual meters. h. perform correctly in tempo rhythm patterns in simple and compound meters encountered in literature and studies. i. recognize visually the key signature of each major key and know the key name. j. write and play scales indicating half step and whole step construction. k. demonstrate the ability to perform larger and smaller whole and half steps as related to scale tonality. l. edit bowing to accomplish the desired interpretation.
5. continue to develop the ability to recognize visually and aurally what is heard in performance and listening activities.	a. perform or write appropriate dictated rhythmic and tonal patterns using scale steps. b. analyze and sing a melodic phrase prior to playing it. c. recognize aurally and visually intervals within a melody before playing it. d. perform melodic intervals and patterns on personal instruments. e. recognize and identify common cadences. f. demonstrate an awareness of key relationships and modulation in a composition. g. play melodies by ear and by rote.

Specific Proficiency Statements	Sample Indicators
6. increase an understanding of harmonic movement, chord construction, and key changes.	a. recognize key changes within a composition, both visually and aurally.
	b. recognize the function of tonic (I), subdominant (IV), and dominant (V) chords.
	c. identify and construct I, IV, and V chords in selected key signatures.
	d. develop an historical perspective of harmonic development.
	e. recognize the function of dissonance in music.
	f. recognize the function of chromaticism, 12-tone row, and tone cluster and understand their place in 20th Century music.
	g. recognize a standard blues progression visually and aurally.
	h. transpose simple melodies at sight.
7. continue to develop skills in the recognition of horizontal and vertical organization known as form.	a. recognize, visually and aurally, elements of a melodic line, such as motive, sequence, phrase, and cadence.
	b. identify and define binary and ternary forms.
	c. identify and define characteristics of different forms of music, such as symphony, concerto, opera, theme and variation, sonata, fugue, passacaglia, chaconne, and minuet.
	d. recognize elements of a composition, such as introduction, theme, trio, and coda.
8. continue to recognize and interpret expressive markings.	a. decide on the appropriate utilization of expressive techniques for music performed.
	b. understand and use vibrato as an expressive element.
	c. describe the function of a given composer's use of expressive techniques.
9. expand ability to identify timbral changes within specific categories of sound and within specific instrumental families.	a. recognize the characteristics of standard orchestral and band instruments.
	b. recognize the changes in timbre which occur with the addition of mutes, changes of embouchure, use of breath, or by changing implements for percussion techniques.
	c. demonstrate an understanding of various timbres by selecting appropriate instruments for composition and/or arrangements.
	d. recognize the timbral changes that occur in relationship to the overtone series.

Specific Proficiency Statements	Sample Indicators
10. expand interpretive skills.	a. define and accurately perform musical symbols and abbreviations, including grace notes and trills. b. demonstrate an understanding of dynamic contrasts, various articulations and tempo changes, and the variety and expression that each creates in music. c. perform phrases musically expressing the natural tension and release. d. demonstrate an understanding of instrumental styles and textures.
11. expand understanding of balance and blend.	a. play in correct balance with other instruments in an ensemble to achieve the desired group sound, including volume and timbre.
12. perform a wide variety of literature.	a. perform music of many styles, forms, and periods, such as baroque, classical, romantic, Twentieth Century (aleatoric, electronic, traditional, jazz). b. listen to, analyze, and perform music of other cultures. c. perform solo and small ensemble literature. d. perform a solo accompanied by piano, small ensemble, orchestra, or band on standard solo repertoire. e. perform as part of an ensemble which accompanies a solo instrument, voice, or large vocal ensemble.
13. expand skills in improvisation.	a. improvise rhythmic and/or tonal patterns. b. improvise a melody or rhythmic accompaniment on a given chord progression. c. improvise an obligato to a given melody.
14. expand skills in composing and arranging.	a. create and write original melodies using melodic and rhythmic notation. b. create harmonic accompaniments for existing and original melodies. c. create and write an original composition with melodic and rhythmic notation and harmonic accompaniment. d. arrange/transpose music for a variety of instruments. e. expand concepts of music through the use of instruments, electronic media, and environmental sounds. f. create piano, combo, or instrumental accompaniments for songs, introductions, or codas to songs or original harmonies.

Specific Proficiency Statements	**Sample Indicators**
15. expand skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, mixed meter, irregular meter, compound meter, and tempi requiring subdivision of these meters. b. function as student conductors in either junior or senior high school orchestra classes.
16. expand skills in evaluation.	a. evaluate individual and group performances and rehearsals making suggestions for improvement. b. evaluate performances as members of an audience. c. evaluate the quality of music performed based on objective criteria developed in class.
17. expand self-improvement skills.	a. recognize the value of individual practice and private instruction. b. maintain proper care of instruments. c. bring necessary supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. expand understanding of the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing good listening skills in music. b. discover that music arouses a wide range of intellectual challenges and varied emotions. c. demonstrate a knowledge of performance opportunities both in school and after graduation. d. demonstrate the ability to evaluate music equipment and needs to leisure-time listening. e. demonstrate a knowledge of music consumer print sources, such as the **Schwann Catalog**, **Consumer Reports**, and **Hi/Fi Stereo Review**. f. demonstrate an ability to evaluate the quality of various products, such as electronic equipment, recordings, and instruments.

Specific Proficiency Statements	**Sample Indicators**
	g. demonstrate a knowledge of comparison shopping techniques for the purchase of a quality instrument and/or equipment.
	h. become aware of music careers and music-related careers, availability of jobs, qualifications, and necessary training or education.
	i. explore music careers by listening to guest speakers and taking field trips.
	j. become aware of the psychological impact and effect of music on an individual and on society through such avenues as mass media.

CHORAL MUSIC

CHORAL MUSIC
UPPER ELEMENTARY LEVEL

Proficiency List 092400

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **choral music** at the upper elementary level, students should	Students will
1. **develop basic skills of tone production.**	a. perform with appropriate singing posture and correct breath control. b. perform with a good singing tone with particular attention to a relaxed vocal quality.
2. **develop basic skills in diction and technique.**	a. produce pure and unified vowel sounds and clearly articulated consonants. b. demonstrate accurate attacks and releases.
3. **develop basic intonation skills.**	a. match pitches and sing a melodic line in tune. b. sing a part accurately in tune with other voices and accompaniment, if any.
4. **develop basic skills in reading music.**	a. use a systematic counting method. b. recognize and sing selected rhythmic and tonal patterns as they occur in a vocal line. c. define and apply through performance selected standard notation, dynamic and articulation markings, and musical terms. d. begin to develop sight-reading skills by singing a variety of beginning level music. e. demonstrate an understanding of the difference between simple and compound meter. f. demonstrate an understanding of meter, tempo, and even and uneven rhythms.
5. **recognize, visually and aurally, what they hear in performance and listening activities.**	a. perform or write appropriate dictated tonal patterns using scale steps. b. identify like, unlike, and irregular phrases from aural and visual examples.

Specific Proficiency Statements	**Sample Indicators**
	c. identify music as moving by steps and/or by skips. d. identify the letter names of all notes in their singing range. e. demonstrate an understanding of the relationship between whole and half steps. f. demonstrate an understanding of key signatures. g. demonstrate an understanding of enharmonic tones. h. recognize, visually and aurally, appropriate major and minor tonalities. i. demonstrate an understanding of key center by singing the tonic and starting tone of selected compositions.
6. develop an awareness of simultaneous sounds and key changes.	a. recognize the difference between unison and harmony. b. recognize, visually and aurally, key changes within a song.
7. explore the interaction of horizontal and vertical organization known as form.	a. recognize the elements of a melodic line, such as motive, sequence, phrase, and cadence. b. identify like, unlike, and irregular phrases from aural and visual examples. c. identify and define binary and ternary forms.
8. recognize and interpret expressive markings.	a. experiment with and explore sounds which are loud and soft. b. decide on the appropriate utilization of louds and softs in familiar and unfamiliar songs.
9. explore and identify specific categories of sound and specific families of voices.	a. recognize the differences between soprano, alto, tenor, and bass and understand the changing voice in both boys and girls. b. demonstrate an understanding of various timbres by selecting appropriate accompanying instruments for a choral composition.
10. develop basic interpretive skills.	a. demonstrate an understanding of dynamic contrasts, various articulations, and tempo changes and the variety and expression each creates in music. b. understand phrasing in music which expresses the natural tension and release.

Specific Proficiency Statements	Sample Indicators
11. develop a basic understanding of balance and blend.	a. listen to other voices and control the individual voice to achieve the desired group sound. b. identify appropriate balance within an ensemble when heard.
12. perform a variety of literature.	a. sing music of varied styles, forms, and periods. b. sing music of other cultures using other languages. c. sing solo and small ensemble literature. d. experience being accompanied by piano.
13. develop basic skills in improvisation.	a. improvise rhythmic and/or tonal patterns. b. improvise melodies on a given chord progression.
14. develop basic skills in composition and arranging.	a. transpose music for individual voices and ranges.
15. develop basic skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, and 4.
16. develop basic skills in evaluation.	a. evaluate individual and group performances and rehearsals making suggestions for improvement.
17. develop basic skills in self-improvement.	a. recognize the value of individual practice. b. recognize the value of private instruction. c. maintain proper care of the voice. d. bring appropriate materials to rehearsals and performances. e. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. develop an understanding of the role of music as an avocation and career.	a. prepare for the fulfilling use of leisure time through the development of performance and listening skills. b. discover that music arouses a wide range of intellectual challenges and varied feelings. c. begin to develop an understanding of music and music-related careers. d. explore music careers by listening to guest speakers and taking field trips.

CHORAL MUSIC
MIDDLE/JUNIOR HIGH SCHOOL & HIGH SCHOOL LEVEL

Proficiency List 093400

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **choral music** at the middle/junior high school and high school level, students should	Students will
1. **continue to develop basic skills of tone production.**	a. demonstrate appropriate singing posture and correct breath support. b. demonstrate correct tone production and resonance with particular attention to a free vocal quality in all parts of the voice range.
2. **continue to develop basic skills in diction and technique.**	a. produce pure and unified vowel sounds and clearly articulated consonants. b. demonstrate accurate attacks and releases.
3. **continue to develop intonation skills.**	a. match pitches and sing a melodic line in tune. b. sing a part accurately and adjust to the vertical structure to produce a finely tuned chord.
4. **continue to develop skills in reading music.**	a. use a systematic counting method. b. recognize and sing, at sight, rhythmic and tonal patterns as they occur in a vocal line. c. define and apply through performance standard notation, dynamic and articulation markings, and musical terms. d. develop sight-reading skills by performing a variety of music. e. demonstrate an understanding of the differences between simple and compound meters recognizing the conducting patterns of each. f. demonstrate an understanding of rhythmic terminology, such as **meter, accent, tempo, syncopation,** and **irregular meters**. g. demonstrate an understanding of major and minor key signatures.

Specific Proficiency Statements	Sample Indicators
5. recognize, visually and aurally, what is heard in performances and in listening activities.	a. perform or write dictated rhythmic and tonal patterns from aural and visual examples. b. identify like, unlike, and irregular phrases from aural and visual examples. c. identify and construct arpeggios and major, minor, chromatic, and modal scales. d. demonstrate an understanding of key center by singing the tonic and the starting tone of selected songs in several major and minor keys. e. sing melodic intervals and patterns using solfege, note names, or numbers.
6. increase understanding of harmonic movement, chord construction, and key changes.	a. recognize key changes within a song, both visually and aurally. b. recognize the function of tonic (I), subdominant (IV), and dominant (V) chords. c. identify and construct I, IV, and V chords in selected key signatures. d. build major, minor, diminished, and augmented chords from a given pitch. e. develop an historical perspective of harmonic development. f. recognize a standard blues progression, both visually and aurally.
7. continue to develop skills in the recognition of horizontal and vertical organization known as form.	a. recognize, visually and aurally, elements of a melodic line, such as motive, sequence, phrase, and cadence. b. identify and define binary and ternary forms. c. identify and define characteristics of different forms of music, such as opera, oratorio, cantata, musical comedy, symphony, concerto, theme and variation, sonata, fugue, and rondo. d. recognize elements of a composition, such as introduction, theme, trio, and coda.
8. continue to recognize and interpret expressive markings.	a. decide on the appropriate utilization of expressive techniques for music studied. b. understand the use of vibrato as an expressive element. c. demonstrate expressive techniques during rehearsals and performances.

Specific Proficiency Statements	Sample Indicators
9. expand abilities to identify timbral changes within specific categories of sound.	a. recognize the differences among soprano, alto, tenor, and bass and understand the changing voice in both boys and girls. b. recognize the various tone colors of voices, traditional and avant garde instruments, and electronic synthesizers. c. demonstrate an understanding of various timbres by selecting appropriate accompanying instruments for a choral composition. d. demonstrate an understanding of the overtone series.
10. expand interpretive skills.	a. define musical symbols and accurately interpret them in performances. b. demonstrate an understanding of dynamic contrasts, various articulations and tempo changes, and the variety of expression each creates in music. c. demonstrate an understanding of vocal styles and textures.
11. expand understanding of balance and blend.	a. control the individual voice in relation to others to achieve the desired group sound related to dynamics, vibrato, and blend. b. recognize the value of amplification equipment and use it correctly where it is appropriate to the style of music. c. identify appropriate balance within an ensemble when heard.
12. perform a wide variety of literature.	a. sing music of many styles, forms, and periods, such as sacred, secular, popular, classical, and traditional. b. sing music of other cultures using languages other than English. c. perform solo and small ensemble literature. d. experience being accompanied by piano, small ensemble, band, or orchestra on standard solo repertoire. e. experience being part of an ensemble which accompanies solo voices.
13. continue to expand skills in improvisation.	a. improvise rhythmic and/or tonal patterns on a given chord or chord progression. b. improvise a melodic or rhythmic accompaniment on a given chord progression.

Specific Proficiency Statements	Sample Indicators
14. expand skills in composing and arranging.	a. create and write original melodies using melodic and rhythmic notation. b. create harmonic accompaniments for existing and original melodies. c. create and write an original composition using melodic and rhythmic notation and harmonic accompaniment. d. arrange/transpose music for a variety of voices. e. expand their use of media through the use of instruments, electronic media, and environmental sounds. f. create piano, combo, or instrumental accompaniments for songs, introductions or codas to songs, or original harmonies.
15. expand skills in conducting.	a. recognize and demonstrate the basic conducting patterns of 2, 3, 4, mixed meter, irregular meter, and compound meter. b. function as student conductors in either junior or senior high school choral classes.
16. expand skills in evaluation.	a. evaluate individual and group performances and rehearsals making suggestions for improvement. b. evaluate the quality of music performed based on the development of objective criteria.
17. expand skills in self-improvement.	a. recognize the value of individual practice and private instruction. b. maintain proper care of the voice. c. bring necessary supplies to rehearsals and performances. d. attend concerts and clinics of school, college, or professional quality through field trips or guest appearances.
18. explore choreography, creative movement, and staging.	a. demonstrate stage movement, blocking, or choreography appropriate to the music studied.

Specific Proficiency Statements	**Sample Indicators**
19. expand an understanding of the role of music as an avocation and career.	a. prepare for fulfilling use of leisure time by developing good listening skills in music. b. discover that music arouses a wide range of intellectual challenges and varied emotions. c. demonstrate knowledge of performance opportunities both in school and after graduation. d. demonstrate the ability to evaluate music equipment and needs for leisure-time listening. e. demonstrate knowledge of music consumer print sources, such as **Schwann Catalog, Consumer Reports,** and **Hi/Fi Stereo Review.** f. demonstrate the ability to evaluate the quality of various products, such as electronic equipment, recordings, and instruments. g. demonstrate knowledge of comparative shopping techniques for the purchase of a quality instrument and/or equipment. h. become aware of music careers and music-related careers, availability of jobs, qualifications, and necessary training or education. i. explore music careers by listening to guest speakers and taking field trips. j. become aware of the psychological impact and effect of music on an individual and on society through such avenues as mass media.

MUSIC REFERENCES

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Aebischer, Delmer W. Self-Evaluation Checklists for School Music Programs. Salem, Oregon: Oregon Department of Education, 1986.

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Visual Art

FOUNDATION PROFICIENCY STATEMENTS - VISUAL ART EDUCATION

List 080000

Students in Indiana schools will be provided learning experiences in **visual art education** which will allow them to:

1. acquire skills, knowledge, and understanding needed to produce expressive works of visual art.
2. acquire the skills, knowledge, and understanding needed to perceive, identify, describe, and analyze the distinguishing characteristics of form, structure, and style in visual art within a variety of cultural and historical contexts.
3. acquire an understanding of the role that the visual arts have played in the lives of people.
4. acquire the skills, knowledge, and understanding needed to evaluate works of art based on critical perception and analysis.
5. acquire the knowledge and understanding needed to establish a lifelong commitment to visual art, value its importance in the life of the community, and develop the ability to continue art education independently.

VISUAL ART EDUCATION SKILL AREAS

The following proficiencies are divided among the four disciplines of art education: art history, art criticism, aesthetics, and art production. Art is the focus and subject matter in each of these disciplines. In the classroom, these four disciplines are not divided but integrated to provide an education that focuses on art. Art production is balanced and strengthened by skills developed in criticism, history, and aesthetics. The proficiencies provide a sequential building of skills and concepts in each of the four disciplines starting at the primary level and progressing through the secondary level. For each instructional level of art classes, the following skills should be included.

Art History

The skills of

1. Perceiving and identifying themes and symbols used in works of art and artifacts from world cultures throughout history.
2. Identifying the role of art in American and world cultures.
3. Studying a work of art or artifact as a visual repository of the culture.

Art Criticism

The skills of

1. Using visual vocabulary and refining artistic perception in responding to works of art and artifacts.
2. Describing, analyzing, and interpreting works of art and artifacts from various world cultures throughout history.
3. Identifying and applying professional criteria in judging a wide range of works of art.
4. Applying artistic perception and critical skill in responding to and judging visual imagery in the culture.

* Aesthetics

The skills of

1. Identifying various definitions of art throughout history as evidenced in significant works of art.
2. Practicing philosophical inquiry in beginning discussion and identification of necessary conditions for qualifying an artifact as a work of art, e.g., "What is art?"

3. Discriminating between preference and judgment.

* The study of aesthetics is introduced at the secondary level only. Development of artistic perception is prerequisite to studying aesthetics. It is developed at the elementary school level through study and practice of foundation skills in history, criticism, and production.

Art Production

The skills of

1. Developing and organizing ideas, feelings, and values for personal expression.
2. Utilizing elements and principles of design effectively.
3. Manipulating visual media and using techniques effectively.
4. Perceiving the world through the sensitive eyes of the artist.

OVERVIEW OF ART STRANDS USED IN THE PROFICIENCIES

ART HISTORY

In studying art history, students view a work of art or artifact as a repository of the culture. They study the historical context of the work to discover how humankind has expressed ideas visually and recorded experiences throughout history. Students study past contributions of artists in order to enrich their own lives and to find roots for understanding art in today's society. This is an active viewing of art where students examine, research, and classify works of art and share results. Through this study, students increase artistic perception and appreciation of traditional and contemporary works of art.

The proficiencies in art history allow for sequential building of skills from primary to secondary level art classes. Art history should be integrated with art criticism, aesthetics, and production.

ART CRITICISM

In art criticism, students increase artistic perception and expand critical skills through observing, discriminating, comparing, contrasting, and discussing a wide range of art. Students learn how to arrive at reasoned, objective judgments based on professional criteria. They do not mimic the views of professional critics but learn to make valid judgments for themselves. Students increase artistic perception necessary for interpreting and judging quality, impact, purpose, and value of visual imagery. Artistic perception and critical skill increases the sum of values and satisfaction one can get from a wide range of art; these skills serve also as a countervailing force against persuasive visual imagery.

The proficiencies in art criticism allow for sequential building of skills from primary to secondary level art classes. Art criticism should be integrated with art history, aesthetics, and production.

AESTHETICS

Artistic perception is a habitual way of perceiving life through the sensitive eye of the artist. Development of artistic perception is prerequisite to studying aesthetics; it is developed at the elementary school level through study and practice of foundation skills in history, criticism, and production.

PRODUCTION

In art making experiences, students express personal ideas, values, and concerns using visual arts media; originality and craftsmanship is emphasized. Students perceive, discriminate, remember, interpret, make decisions, solve problems, compare, and make value judgments, transfer findings to other situations, and apply known information to new settings. Students study the work of artists and peers to discover possible ways of communicating ideas or beliefs through visual media. Students increase artistic perception through sequential experiences in examining concepts, media, and works of art.

A wide range of media is covered in the proficiencies; however, selection of specific media will depend on individual school settings. A provision of two- and three-dimensional media is given at all levels. It is suggested that a breadth of art media be experienced at the primary school level progressing to in-depth involvement with selected media at the secondary school level. Opportunities for examination of careers related to the visual arts are provided at all levels.

The proficiencies in production allow for sequential building of skills from primary to secondary school level art classes. Art production should be integrated with proficiencies in art history, art criticism, and aesthetics. Production, art history, art criticism, and aesthetics each combine to reinforce, explain, clarify, or enrich the other.

VISUAL ART
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 081000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **visual art** at kindergarten through grade three, students should	Students will
Art History	
1. identify themes in works of art and artifacts.	a. identify dominant images, moods, and themes in works of art and artifacts. b. identify similar subject matter and mood in works of art and artifacts.
2. identify similar styles in works of art and artifacts in American culture.	a. match, pair, and group works of art or artifacts of similar style from one culture. b. discriminate a work of art of dissimilar style from a group of works of art of similar style.
3. identify sources of art in the community.	a. identify art products in the community, such as buildings, clothing, road signs, billboards, advertising, television, film, and works of art. b. recognize and discuss different ways people are involved with art in the community. c. recognize signs and symbols associated with cultural celebrations, e.g., holidays, birthdays, weddings.
4. examine works of art and artifacts for clues to the function or purpose of the object.	a. smell, taste, touch, listen to, and search works of art or artifacts for clues to how they were made (machine, human-crafted), when they were made (past, present), what they were made from (clay, paint, metal), and why they were made (purpose, function). b. compare unfamiliar works of art or artifacts with similar familiar works of art or artifacts to help speculate about their function or purpose. c. recognize what an art historian does.

Specific Proficiency Statements	**Sample Indicators**
Art Criticism	
5. use a basic visual vocabulary for perceiving and responding to works of art or artifacts.	a. define the elements of design, e.g., line, color, value, texture, shape, form, space and identify these elements in the work. b. define general relationships of elements, e.g., repetition, empnasis, proportion and identify these relationships in the work. c. define expressive qualities, e.g., sights, sounds, smells, moods and identify these qualities in the work.
6. respond to visual qualities in works of art and artifacts.	a. describe and identify visual qualities, e.g., elements, media, technique, and objects in the work. b. compare similarities in elements, media, technique, and objects in several works. c. identify general ideas or content in the work and support with visual evidence in the work. d. compare works with similar ideas or content. e. verbalize associations and referances in observing art, e.g., "This sounds like, reminds me of...."
7. examine works of art of a wide range of media, styles, and cultural contexts and identify general similarities in style.	a. discriminate between realistic and abstract representation in works. b. identify works of similar style or technique, e.g., art by one artist or art from one art movement.
8. listen to others respond to works of art or artifacts.	a. listen to verbal and written comments of peers, teachers, poets, artists, critics, or historians about a work of art or artifact. b. recognize what an art critic does.

Specific Proficiency Statements	Sample Indicators
Production	
9. **express visually ideas, feelings, and values.**	a. identify expressive imagery in works of art as stimuli for personal work. b. react to stimuli by ideas through visual art media. c. participate in discussion concerning ways to communicate ideas and feelings. d. finalize an initial idea by demonstrating fluency, flexibility, elaboration, and originality. e. produce works of art expressing personal interests, preferences, themes, feelings, or moods.
10. **identify, recognize, and apply the elements of design and their expressive qualities in creating student works, e.g., line, shape, form, value, texture, color, and space.**	a. identify and create with line in various media, e.g., diagonal, horizontal, vertical, thick, thin, curved, spiral, or concentric. b. explore and create with shape and form in various media. c. make and identify light and dark. d. make actual and "implied" textures in various materials. e. identify and use primary, secondary, and complementary colors. f. create the illusion of depth on a flat surface by overlapping objects.
11. **identify, recognize, and apply the principles of design in student works, e.g., unity, repetition, variety, movement, emphasis, balance, and proportion.**	a. use the art elements to create repetition. b. recognize, discriminate, and use differences in elements. c. direct the movement of the eye in two-dimensional student works and around three-dimensional student works. d. generate movement through repetition of elements. e. generate areas of emphasis in design by accenting certain elements. f. use gradual changes in art elements.

Specific Proficiency Statements	Sample Indicators
12. create with a variety of two-dimensional media, e.g., drawing, painting, printmaking, graphic design, photographic/film, and collage/mixed media.	a. use a variety of large drawing instruments and techniques. b. use a variety of painting tools, media, and techniques. c. produce prints (singular or multiple) using a variety of techniques. d. create using collage and mixed media techniques.
13. create in a variety of three-dimensional media, e.g., ceramics, jewelry, sculpture, and fibers.	a. construct functional or decorative ceramic ware through simple handbuilding techniques. b. create using basic jewelry forming and surface treatment concepts. c. create sculpture with additive and subtractive processes by carving, constructing/assembling, or modeling materials. d. create with fibers utilizing introductory techniques.
14. recognize art career opportunities.	a. discuss and compare the everyday objects that are a result of the work of an artist.

VISUAL ART
UPPER ELEMENTARY LEVEL

Proficiency List 082000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **visual art** at the upper elementary level, students should	Students will
Art History	
1. identify themes and symbols used in works of art and artifacts that portray common ideas or meaning.	a. identify similar symbols used in works of art and artifacts from different cultures in America, e.g., holidays, rituals, celebrations, and common themes. b. identify similar symbols used in works of art from various cultures.
2. identify relationships between the beliefs and values of a culture.	a. study beliefs and values of a particular world culture and identify visual qualities in works of art or artifacts from the culture that reflect those beliefs and values. b. match, pair, and group works of art and artifacts of similar style from various world cultures. c. identify visual qualities that make works similar.
3. identify sources of art in the community.	a. identify art products in the community and describe how these communicate values and ideas. b. describe ways people are involved in the visual arts within a community, including artists, patrons, curators, and gallery owners.
4. study and classify works of art.	a. research a work of art or artifact and identify by whom, when, where, and how it was made and what purpose it served. b. classify works of art or artifacts by general style and time frame. c. recognize that knowledge of the historical background of a work of art or artifact can increase understanding of and appreciation for the work.

Specific Proficiency Statements	Sample Indicators
Art Criticism	
5. expand visual vocabularies for increased perception of and response to works of art and artifacts.	a. use words describing variations of elements, e.g., dull/bright colors, small/large shapes, subtle/bold textures, and identify these variations in the work. b. define principles used in the work, e.g., variety, unity, movement, balance, emphasis, repetition, variety, proportion, and identify these principles in the work. c. identify media and technique used in the work, e.g., paint - spray, brush, drip. d. use and refine expressive works that describe mood or emotion, e.g., anger - rage/irritation, and identify these qualities in the work.
6. describe, analyze, and interpret works of art and artifacts.	a. describe and identify elements, media, and technique in the work. b. analyze how the artist has used subject matter, media, and elements to structure communication of an idea by identifying dominant principles in the work, e.g., unity, balance, movement, emphasis, repetition, proportion, and variety. c. interpret ideas and content communicated in the work and identify how the artist has used elements, media, techniques, and visual symbols to communicate ideas in the work.
7. examine and discriminate different styles of art.	a. identify works of art of similar style, e.g., impressionism, conceptual, realism, expressionism. b. study an artist and discriminate the personal style of that artist from work of artists using similar styles.
8. study the work of the art critic.	a. listen to comments concerning a work of art or artifact by an art critic while viewing the work of art. b. write a description, analysis, and interpretation of a work of art or artifact. c. identify how a critique can increase one's perception of and appreciation for a work of art.

Specific Proficiency Statements	Sample Indicators
Production	
9. **express visually ideas, feelings, and values.**	a. identify expressive imagery in works of art as stimuli for personal work. b. react to new interests, preferences, and themes and incorporate these into student work using advanced art skill. c. finalize an initial idea by demonstrating fluency, flexibility, elaboration, and originality. d. express feelings or moods using a variety of media. e. use art media and methods from other cultures as stimuli to expand personal ideas.
10. **identify, recognize, and apply the elements of design and their expressive qualities in creating student works, e.g., line, shape, form, value, texture, color, and space.**	a. identify the use of line in various media and use lines in various media, e.g., diagonal, horizontal, vertical, thick, thin, curved, spiral, or concentric, parallel, perpendicular, and radial lines. b. identify geometric, organic, and implied shapes and use them in various media. c. identify and use the basic forms, e.g., cone, cube, sphere, cylinder, and pyramid. d. identify light and dark shapes and form. e. identify and make actual and "implied" textures in various materials. f. identify and use the three properties of hue, value, and intensity. g. mix primary, secondary, intermediate (tertiary), complementary, analogous, and monochromatic colors, tints, and shades. h. alter the intensity of colors by adding gray or complementary colors. i. create the illusion of depth by (aerial perspective): overlapping shapes and forms, making distant objects smaller and closer objects larger, placing distant objects higher and closer objects lower in the picture, using less detail on distant objects and greater detail on closer objects, using duller, less intense hues for objects in the distance, coloring distant objects with hues that appear more blue to suggest the layers of atmosphere between the view and those objects, using converging parallel lines. j. identify and use positive and negative space.

Specific Proficiency Statements	Sample Indicators
11. **identify, recognize, and apply the principles of design in student works, e.g., unity, repetition, variety, movement, emphasis, balance, and proportion.**	a. create unity by using repetition and variety to achieve a quality of oneness or wholeness. b. use the art elements to create repetition. c. recognize, discriminate, and use differences in elements. d. realize the differences in dominant and subordinate elements. e. direct the movement of the eye in two-dimensional student works and around three-dimensional student works. f. generate movement through repetition of elements rather than through random arrangement. g. generate areas of emphasis in design by accenting certain elements. h. identify and make changes in art elements to demonstrate an understanding of emphasis. i. identify and make formal (symmetry), informal (asymmetry), and radial balance. j. use gradual changes in art elements.
12. **create with a variety of two-dimensional media, e.g., drawing, painting, printmaking, graphic design, computer graphics, photographic/film, and collage/mixed media.**	a. create using mixed media techniques, e.g., collage, montage, and mosaic. b. demonstrate skill in utilizing various large drawing instruments. c. develop skills in lettering/typography construction and spacing skills in making graphic design products, e.g., signs and posters. d. use a variety of painting tools, media, and techniques. e. produce prints (singular or multiple) using a variety of techniques. f. use edition numbering procedures with the creation of multiple prints. g. create using introductory techniques in photography/film/computer graphics.
13. **create with a variety of three-dimensional media (ceramics, jewelry, sculpture, and fibers) and consider functional requirements.**	a. construct ceramic objects with handbuilding techniques. b. create using basic jewelry forming and surface treatment techniques, e.g., metal foil, ceramic, and paper or paper mache jewelry. c. create sculpture with the additive and subtractive processes by carving, constructing/assembling, or modeling materials. d. create textiles and weavings utilizing introductory techniques.

Specific Proficiency Statements	**Sample Indicators**
14. recognize career opportunities related to visual art.	a. identify a wide variety of career options available in the visual arts, e.g., fine artist, commercial artist, critic, historian, or aesthetician. b. identify skills required for various career options.

VISUAL ART
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 083000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **visual art** at the middle/junior high school level, students should	Students will
Art History	
1. **compare themes and symbols in works of art and artifacts from a world culture and identify how these reflect the beliefs and values of the culture.**	a. compare works of art and artifacts that show similar themes and content from a variety of world cultures and identify qualities that make the works similar. b. identify symbols or visual qualities in the work that communicate the beliefs and values of the culture.
2. **identify how change in the style of a work of art or artifact reflects change in beliefs, values, technology, or ways of seeing in a culture.**	a. study the beliefs, values, technology, and ways of seeing in various world cultures and identify now these influence styles of art from these cultures. b. distinguish among art from major cultural areas of the world, e.g., Europe, Africa, Latin American, Asia.
3. **identify the role of art in American and other world cultures.**	a. identify the various functions of works of art and artifacts in American and world cultures. b. identify ways visual images manipulate or influence public behavior or thought.
4. **study and classify a work of art or artifact in relation to the historical context of the work.**	a. research a work of art or artifact and identify by whom, when, where, and how it was used. b. read or listen to a historian's critique of a work of art and identify visual qualities in the work that are discussed in the critique. c. classify works of art and artifacts by style, period, and culture. d. recognize that knowledge of historical background of a work of art or artifact can increase understanding of and appreciation for the work.

Specific Proficiency Statements	Sample Indicators
Art Criticism	
5. expand visual vocabularies for increased perception of and response to works of art and artifacts.	a. use words describing variations in elements, e.g., line, shape, form, color, value, texture, space, and identify these variations in the work. b. use words describing variations in principles, e.g., unity, movement, balance, emphasis, repetition, proportion, and variety, and identify these variations in the work. c. identify media and techniques used in the work of art. d. use and define expressive words that describe emotion or mood and identify these qualities in the work.
6. describe, analyze, interpret, and judge works of art and artifacts.	a. describe and identify elements, media, and technique in the work. b. analyze how the artist has structured symbols, media, and elements to communicate an idea. c. identify dominant principles in the work, e.g., unity, balance, movement, emphasis, repetition, proportion, and variety. d. interpret ideas and content communicated in the work and identify how the artist has used elements, media, techniques, and visual symbols to communicate. e. examine the historical context of the work, e.g., culture, period, and artistic style. f. judge the artistic merit of the work based on given criteria, e.g., imitationalism, emotionalism, formalism.
7. identify and apply criteria in judging art.	a. identify and compare various styles of art throughout history and identify the underlying philosophy by which the work was created, e.g., imitationalism, emotionalism, formalism. b. read or listen to critiques of art by historians or critics and identify the criteria used by these professionals.

Specific Proficiency Statements	Sample Indicators
8. study the work of the art critic.	a. study the work of art critics and identify the written characteristics with the visual qualities in the work of art. b. critique a work of art and compare the critique with a critic's comments on the same work of art. c. identify how a critique can increase one's perception of and appreciation for a work of art.
Aesthetics	
9. study and classify works of art in relation to different philosophies of art defined by aestheticians.	a. discuss and identify general definitions of art as defined by the work of aestheticians, e.g., Plato, Aristotle, Collingswood, Wietz, Langer. b. classify works of art by applying these general definitions of "What is art?", e.g., imitationalism, emotionalism, formalism.
10. discriminate between professional judgment and personal preference.	a. identify professional criteria used by aestheticians when judging the aesthetic value of a work of art. b. identify personal preferences for works of art.
Production	
11. express visually ideas, feelings, and values.	a. identify expressive imagery in works of art as stimuli for personal work. b. engage in problem-solving activities. c. combine ideas, feelings, and values to create a personal statement. d. finalize an initial idea by demonstrating fluency, flexibility, elaboration, and originality. e. increase ability to translate visual observations into visual imagery. f. create for symbolic and psychological effect. g. use art media and methods from other cultures as stimuli to expand personal ideas.
12. identify, recognize, and apply the elements of design and their expressive qualities in creating student works, e.g., line, shape, form, value, texture, color, and space.	a. recognize, identify, and represent objects with these lines, e.g., blind contour, contour, and gesture. b. recognize that shapes can be defined by an outline, color, value, or texture differences with a surrounding area.

Specific Proficiency Statements	Sample Indicators
	c. identify and use geometric, organic, and implied shapes with various media. d. create the illusion of three-dimensional forms on two-dimensional surfaces and examine and render the effects of light on forms, e.g., highlight, halftone, reflected light, and cast shadow. e. identify and use light and dark shapes and forms. f. recognize how value is used to show form in two-dimensional work. g. use actual and "implied" textures in various materials. h. identify and use hue, value, and intensity. i. use primary, secondary, intermediate (tertiary), complementary, analogous, and monochromatic colors, tints, and shades. j. alter the intensity of colors by adding gray or their complementary colors. k. use color to express moods, for symbolic and psychological effect. l. create the illusion of depth by using aerial perspective, e.g., overlapping, size, placement, color. m. use one and two point linear perspective. n. identify and make the horizon line at the eye level of the viewer in student work. o. identify and use positive and negative space.
13. identify, recognize, and apply the principles of design in student works, e.g., unity, repetition, variety, movement, emphasis, balance, and proportion.	a. create unity by using repetition and variety to achieve a quality of oneness or wholeness. b. use the art elements to create repetition. c. recognize and identify the differences in dominant and subordinate elements. d. direct the movement of the eye in two-dimensional student works and around three-dimensional student works. e. generate movement through repetition of elements rather than through random arrangement. f. generate areas of emphasis in design by accenting certain elements. g. identify and make formal (symmetry), informal (asymmetry), and radial balance. h. use gradual changes in art elements.

Specific Proficiency Statements	**Sample Indicators**
14. create with a variety of two-dimensional media, e.g., drawing, painting, printmaking, graphic design, computer graphics, photographic/film, and collage/mixed media, to show various realistic and abstracted subject matter while providing opportunities for individual exploration and involvement.	a. create using mixed media techniques, e.g., collage, montage, and mosaic. b. use elementary software programs to create computer graphics. c. create drawings using a variety of drawing media (charcoal, pencils/colored pencils, markers, chalk, oil-pastels, and pen and ink) and techniques (shading, blending, crosshatching, and stippling). d. develop skills in lettering/typography construction and spacing techniques to create signs and posters. e. develop layout skills (using thumbnail sketches, rough and comprehensive layouts) in making graphic design products (brochures, posters, signs, ads, symbols, or logos). f. properly prepare painting surface before paint is applied. g. develop ability in various opaque and transparent painting processes. h. develop techniques in photography and film i. produce prints, e.g., relief, stencil, and/or intaglio processes. j. use edition numbering procedures in the creation of multiple prints.
15. create student works in a variety of three-dimensional media, e.g., ceramics, jewelry, sculpture, and fibers, and consider functional requirements.	a. make clay objects using the pinch and pull, coil, slab, and drape/press mold handbuilding techniques or combinations of these techniques. b. create with ceramic decorating processes, e.g., carving, stencil, sgrafitto, mishima, wax resist, engobes, and glaze application methods. c. create using basic jewelry forming and surface treatment techniques, e.g., metal foil jewelry, metal enameling, piercing, ceramic jewelry, and paper or paper mache jewelry. d. create sculpture with the additive and subtractive processes by carving, constructing/assembling, or modeling materials, e.g., plaster sculpture, ceramic sculpture, and wood sculpture. e. identify stabiles, mobiles, relief/bas relief, and sculpture in the round. f. create with fibers, e.g., weaving, stitching, coiling, basketmaking, dyeing, and batik.

Specific Proficiency Statements	**Sample Indicators**
16. recognize career opportunities related to visual art.	a. identify a wide variety of career options available in the visual arts, e.g., fine artist, commercial artist, critic, historian, or aesthetician. b. identify skills required for various career options.

VISUAL ART
HIGH SCHOOL LEVEL

Proficiency List 084000

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **visual art** at the high school level, students should	Students will
Art History	
1. compare themes in works of art and artifacts from a variety of cultures and identify how these works reflect the beliefs, values, technology, and ways of seeing of the culture.	a. analyze a theme used in a work of art from various world cultures. b. identify symbols or visual qualities in the work that communicate the beliefs, values, technology, or ways of seeing within a culture.
2. identify general styles and periods of major works of art and the political, social, and economic factors that influenced the work.	a. match historical, social, political, or economic factors of a culture with the appropriate styles of art from the culture. b. categorize works of art into similar periods and styles.
3. compare the role of art in America with the role of art in other world cultures.	a. identify and compare sources and purposes of art in world cultures. b. identify examples of works of art or artifacts that have influenced behavior or thought in the culture.
4. study and practice the methodology of the art historian.	a. read and write historical studies on a work of art and artifacts, including information on the artist, culture, period, and effect of the work on the culture and on other artists. b. identify criteria used by professional historians in judging and classifying works of art. c. recognize that knowledge of historical background of a work of art or artifact can increase understanding of and appreciation for the work.

Specific Proficiency Statements	Sample Indicators
Art Criticism	
5. expand visual vocabularies for increased perception of and response to works of art and artifacts.	a. use words describing variations in elements, e.g., line, shape, form, color, value, texture, space, and identify these variations in the work. b. use words describing variations in principles, e.g., unity, movement, balance, emphasis, repetition, variety, and proportion, and identify these qualities in the work.
6. describe, analyze, interpret, and judge works of art and artifacts from various world cultures throughout history.	a. describe and identify elements, media, and technique in the work. b. analyze how the artist has used subject matter, media, and elements to structure communication of an idea by identifying dominant principles in the work, e.g., unity, balance, movement, emphasis, repetition, proportion, and variety. c. interpret the metaphorical content of visual symbols used in the work. d. examine and apply information found outside the work, e.g., culture, period, artistic style. e. judge a work utilizing professional criteria of the critic, e.g., imitationalism, emotionalism, formalism.
7. identify and apply criteria in judging art.	a. identify and compare various styles of art throughout history and identify the dominant underlying philosophy of the work, e.g., imitationalism, emotionalism, formalism. b. read or listen to critiques of art by historians or critics and identify the criteria used by these professionals. c. identify how styles of art have changed throughout history as evidenced in works of art of major significance.
8. identify methodology and purpose of the art critic.	a. examine and discuss the work of professional art critics. b. critique a work of art and compare the critique with a critic's comments on the same work of art. c. identify how the art critic can increase one's perception of and appreciation for a work of art.

Specific Proficiency Statements	Sample Indicators
Aesthetics	
9. study and classify works of art in relation to different philosophies of art defined by aestheticians.	a. read, discuss, and identify definitions of art as defined by the work of aestheticians, e.g., Plato, Aristotle, Collingswood, Wietz, Langer. b. classify works of art by applying these definitions of "What is art?", e.g., imitationalism, emotionalism, formalism. c. identify how definitions of art have changed as evidenced in significant works of art throughout history. d. practice beginning discussion and identification of necessary conditions for qualifying an artifact as a work of art, e.g., "What is art?"
10. discriminate between professional judgment and personal preference.	a. identify professional criteria used by aestheticians when judging the aesthetic value of a work of art. b. identify personal preferences for works of art.
Production	
11. express visually ideas, feelings, and values.	a. identify expressive imagery in works of art as stimuli for personal work. b. engage in problem solving and brainstorming to expand possibilities for personal expression. c. transform personal experiences and interests into student work that expresses personal style. d. finalize an initial idea by demonstrating fluency, flexibility, elaboration, and originality. e. continue to develop reflective and analytical skills in imaginative thinking. f. record images, ideas, unusual views, objects, and people in a sketch book. g. use art media and methods from other cultures as stimuli to expand their own ideas.

Specific Proficiency Statements	Sample Indicators
12. identify, recognize, and apply the elements of design and their expressive qualities in creating student works, e.g., line, shape, form, value, texture, color, and space.	a. recognize, identify, and create with lines, e.g., blind contour, contour, and gesture. b. recognize that shapes can be defined by an outline, color, value, or texture differences with a surrounding area. c. identify and use shapes and implied shapes with various media. d. create the illusion of three-dimensional forms on two-dimensional surfaces and examine and render the effects of light on forms, e.g., highlight, halftone, reflected light, and cast shadow. e. use value to show form in two-dimensional work. f. use actual and "implied" textures in various materials. g. use texture to provide interest and decorative detail. h. identify and use hue, value, and intensity. i. use primary, secondary, intermediate (tertiary), complementary, analogous, and monochromatic colors, tints, and shades. j. alter the intensity of colors by adding gray or their complementary colors. k. visualize and understand the process of color illusions such as after-image and simultaneous contrast. l. understand the differences between the effect of color in the retina (physiological) and the effect of color on the mind (psychological). m. create the illusion of depth by aerial perspective. n. use one, two, and three point linear perspective. o. place the horizon line at the eye level of the viewer in student work. p. use both positive and negative space.
13. identify, recognize, and apply the principles of design in student works, e.g., unity, repetition, variety, movement, emphasis, balance, and proportion.	a. create unity by using repetition and variety to achieve a quality of oneness or wholeness. b. use the art elements to create repetition. c. recognize, discriminate, and use differences in elements. d. recognize and identify the differences in dominant and subordinate elements. e. direct the movement of the eye in two-dimensional works and around three-dimensional works. f. generate movement through repetition of elements rather than through random arrangement.

Specific Proficiency Statements	**Sample Indicators**
	g. generate areas of emphasis in design by accenting certain elements. h. identify and make formal (symmetry), informal (asymmetry), and radial balance. i. create an equal distribution of visual elements to a central line or area (equilibrium) to achieve formal (symmetrical) balance. j. use gradual changes in art elements to understand proportion.
14. create with a variety of two-dimensional media, e.g., drawing, painting, printmaking, graphic design, computer graphics, photographic/film, and collage/mixed media, to show various realistic and abstracted subject matter while providing opportunities for individual exploration and involvement in selected media areas.	a. create using mixed media techniques, e.g., collage, montage, and mosaic. b. use software programs to create computer graphics. c. create drawings using a variety of drawing media, e.g., pencils/colored pencils, markers, chalk, oil-pastels, charcoal, scratchboard, and pen and ink, and use techniques, e.g., shading, blending, crosshatching, and stippling. d. refine skills in lettering/typography construction and spacing techniques to create graphic design products, e.g., signs and posters. e. refine layout skills in graphic design products, e.g., illustrations, brochures, posters, signs, ads, symbols, and logos. f. develop a general understanding of production methods, e.g., mechanicals, color separation techniques, and line and halftone related printing processes. g. refine ability in opaque and transparent painting processes, e.g., transparent watercolor, gouache, oil, and acrylic. h. create with photographic and/or film media and techniques. i. produce prints using the relief, stencil, intaglio, and/or planographic processes, e.g., drypoint, etching, silkscreen, lithography, linoleum block, wood block, wood engraving, and collagraph. j. use edition procedures and collector's terms associated with multiples in printmaking, e.g., artist proofs, states, and edition numbering procedures.

Specific Proficiency Statements	Sample Indicators
15. create with three-dimensional media, e.g., ceramics, jewelry, sculpture, and fibers, using expanded knowledge of various media, methods, and related functional requirements.	a. create clay objects using handbuilding forming techniques, e.g., pinch, coil, slab, and drape/press mold or combinations of these techniques and also wheel throwing techniques. b. create with ceramic decorating processes, e.g., carving, stencil, sgrafitto, mishima, wax resist, engobes, and underglaze methods. c. create with ceramic glaze decorating techniques, e.g., glaze formulation and mixing and glaze application methods. d. create using advanced jewelry forming techniques, e.g., forging, sawing/piercing, soldering/construction, repousse, raising, fusing, and cast jewelry. e. create using advanced jewelry surface treatment techniques, e.g., metal enameling, chasing, and lapidary, stone/bezel setting. f. create sculpture by carving materials, e.g., plaster, wood, stone, wax, and soap. g. create sculpture by modeling materials, e.g., clay, plaster, and wax. h. create sculpture by constructing and assembling methods, e.g., gluing, soldering/welding, folding, riveting, and nailing. i. identify stabiles, mobiles, relief/bas relief, and sculpture in the round. j. create with fibers, e.g., weaving, stitching, coiling, basketmaking, dyeing, and batik.
16. recognize career opportunities related to visual art.	a. identify a wide variety of career options available in the visual arts, e.g., fine artist, commercial artist, critic, historian, or aesthetician. b. identify skills, working conditions, salary, and education involved for various career options.

VISUAL ART REFERENCES

J. Paul Getty Trust. Beyond Creating: The Place for Arts in America's Schools. Los Angeles, CA: The Getty Center for Education in the Arts, 1985.

California State Department of Education. Visual and Performing Arts Framework. Sacramento, CA: California State Department of Education, 1982.

List 090600

Students in Indiana schools will be provided learning experiences in the **theatre arts** which allow them to:

1. express themselves through the creative use of movement, voice, and language.

2. perceive, identify, describe, and analyze the distinguishing characteristics of form, structure, and style within the theatre arts.

3. experience a wide variety of acting and production skills and concepts.

4. explore creative drama and improvisational theatre.

5. evaluate theatrical works based on critical perception and analysis.

6. develop a lifelong commitment to theatre arts, value their importance in the life of the community, and experience aesthetic growth through appreciation of theatrical events.

THEATRE ARTS EDUCATION SKILL AREAS

For each instructional level, the following skills should be included.

DESCRIBING

The skills of:

1. Perceiving movement and demonstrating an understanding of movement through
    a. Verbal description, including both image and technical terminology.
    b. Physical description, including imitation and creation.
    c. Visual description, including diagrams, traditional and nontraditional notational schemes.
    d. Historical description.

ORGANIZING

Those movements related to the creation of theatre through organization and composition:

1. The spontaneous development of artistic theatre ideas through improvisation as a result of the ability to effectively organize basic art elements of time and space.
2. The communication of one's artistic intent through theatre as a result of the ability to effectively organize the basic theatre elements.

PRODUCING

Those skills related to the production of theatre:

1. The use of the body and voice as tools of expression.
2. The manipulation of environmental resources.
3. The integration of other art forms, such as music, visual arts, and dance.

EVALUATING

Those skills related to the critical evaluation of theatre:

1. Perceiving and analyzing the compositional elements of theatre.
2. Analyzing the quality of theatre.
3. Analyzing the technical skills of the theatre practitioners.
4. Establishing personal values related to works of theatre as they relate to the individual or group.

THEATRE ARTS
ELEMENTARY SCHOOL LEVEL

Proficiency List 091600

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in the **theatre arts** at the elementary school level, students should	Students will
Creative Movement and Pantomime	
1. explore ways in which the whole body can be used for creative expression.	a. communicate a feeling in nonverbal fashion. b. utilize the elements of movement, such as level, direction, speed, and type (percussive/sustained) to pantomime a story. c. incorporate whole body movement to express characterization in a play format. d. imitate nonhuman movement, such as that of animals, trees, the wind.
2. explore ways in which gestures and facial expression can be used creatively.	a. communicate a feeling through gesture and facial expression only. b. develop gestures and facial expressions which tell a story in a nonverbal way. c. incorporate gesture and facial expressions to enhance the specific personality of a character in a play.
Dialogue/Vocalization	
3. use the voice for creative expression.	a. recognize the differences between voices while listening to a tape, record, or play. b. experiment with the elements of speed, pitch, volume and tone to express character differences. c. utilize a specific speech pattern to communicate personality of a character in a play. d. relate a story using voices and dialogue appropriate to specific characters.

Specific Proficiency Statements	Sample Indicators
Dramatic Form	
4. recognize the similarities and differences among radio, television, and play productions.	a. attend three different types of productions and discuss them. b. adapt a favorite story or script for each form of media. c. create a new episode for a well-known character to be presented in each of the three formats.
5. identify the components that comprise a theatrical production.	a. attend a production and identify these elements - exposition, plot, characters, theme, dialogue, action, situation, and spectacle. b. adapt a familiar story by changing one of its elements e.g., changing the setting by having Goldilocks lost in a department store trying various products.
6. demonstrate a knowledge of theatre terms, e.g., acting, actor, stage, props, costume, makeup, and set.	a. hear terms used by the teacher. b. use terms while improvising/producing plays. c. match vocabulary cards with pictures showing various theatre elements.
7. view and demonstrate an understanding of how other arts relate to dramatic activities.	a. use sculpture, film, painting, and music in dramatic productions. b. find varied art forms that address similar subjects, such as love, friendship, the environment as depicted via music, theatre, dance, or visual art. c. use music and dance to tell a story in a dramatic way.
8. demonstrate an understanding of how dramatic activities are enhanced through the use of scenic elements.	a. use boxes, chairs, desks, or other scenic elements available in the classroom. b. use inexpensively constructed sets. c. acquire and use set pieces, such as tables and chairs. d. use pictures of settings.
9. demonstrate how dramatic activities are strengthened through the use of properties.	a. improvise dramatic uses for found objects, such as rocks and toys. b. develop a character through the use of signature property, such as hats, canes, clothing, or personal belongings. c. manipulate properties within a play format.

Specific Proficiency Statements	Sample Indicators
10. demonstrate an understanding of how dramatic activities are strengthened through the use of lighting.	a. use lighting for the beginning and ending scenes. b. use lighting for setting the time of day. c. use lighting for setting the mood.
11. demonstrate an understanding of how dramatic activities are strengthened through the use of sound.	a. use the body to produce sound. b. use music to set a mood. c. create sound effects to set scenes.
12. demonstrate an understanding of how characterization is strengthened through the use of costumes.	a. improvise dramatic uses for given costume pieces, e.g., hats and scarfs. b. develop a character through the use of a signature costume piece including masks. c. perform in costume within a play format.
13. demonstrate an understanding of how characterization is strengthened through the use of makeup.	a. improvise a specific character in response to makeup. b. develop a character through the use of signature makeup including masks. c. perform in makeup within a play format.
14. identify the elements of dramatic literature.	a. view or read a play and identify specific elements of the play through class discussion. b. organize and write a script for a play. c. adapt a story from the basal reading series. d. make an improvisation into a play.
15. portray characters in creative dramatizations.	a. create and deliver dialogues for characters from a story or poem. b. write and perform an original exchange between characters in history, characters from a TV show, or people in real life. c. develop and perform a possible situation drawn from an historical event, e.g., Columbus landing in the West Indies, Cortez trying to get gold from the Aztecs, Lincoln discussing his feelings about Gettysburg. d. act out a scene, e.g., someone playing baseball, raking leaves, hunting a missing dog, making cookies.

Specific Proficiency Statements	Sample Indicators
16. view a play produced by a performing group such as a high school, college or university, or children's theatre group.	a. visit the backstage area to view set pieces and props. b. listen to the dialogue without the enhancement of any production values. c. see the set without the employment of any lighting effects. d. draw conclusions about the general construction of props and sets, the use of music, and the effects of lights on performances. e. discuss with the theatre artists their work and the production.
Improvisation	
17. identify the problems presented in a story/play and tell what the resolution of those problems entails.	a. discuss a play, script, or story. b. improvise a solution to a problem drawn at random. c. dramatize the problem of a famous person and the solution to the problem.
18. use improvisation to investigate life experiences.	a. pantomime occupations and activities for others to guess. b. explore environmental changes, such as weightlessness, walking through sand, and being extremely hot/cold. c. interpret nonhuman changes, such as a plant growing, the wind blowing, the motion of the earth as it revolves and rotates, and magnetism.
19. use creative drama to tell a story.	a. relive an historical event, e.g., man discovering fire, signing of the Declaration of Independence, man's first step on the moon. b. retell a favorite story, poem, or play. c. play charades guessing "What happened on the way to school?", etc. d. pantomime while listening to a story being read or to music, e.g., A Night on Bald Mountain by Modeste Mussorgsky.

Specific Proficiency Statements	Sample Indicators
Sensitivity	
20. acquire and apply skills and attitudes that develop a positive self-concept.	a. participate in a creative drama exercise, e.g., using chairs to form a boat for Washington to cross the Delaware. b. express creative emotions during improvisation sessions. c. attend, read, analyze, and/or perform plays which help to gain insight into human behavior.
21. acquire and apply interpersonal skills.	a. work cooperatively to help in play production, e.g., construction of sets, costume construction, collection of props. b. improvise a skit with at least two other students.
22. share creative drama activities with others.	a. participate in creative dramatics exercises. b. participate in group improvisations. c. read/tell a story to others. d. prepare a play for an audience.
23. demonstrate responsible behavior in theatre activities and apply appropriate safety procedures.	a. come to rehearsals regularly and on time. b. care for props, costumes, and scripts. c. listen attentively and use proper etiquette during a play. d. take precautions around technical equipment to avoid accidents.
24. focus attention on sensory experiences and apply sensory perception and concentration techniques.	a. describe a memory in terms of the five senses. b. explore the environment with sensory deprivation, e.g., blindfold walk, "feely box," smelly jars. c. relate a feeling in terms of sensory information, e.g., "seeing red" or shaking when angry.
25. analyze personal and/or group creative experiences.	a. share feelings during specific points in a production. b. discuss what was liked. c. state what might be done differently. d. applaud. e. use laughter in appropriate situations. f. compliment production participants including actors, technical staff, and directors.

Specific Proficiency Statements	**Sample Indicators**
26. respond positively to criticism by peers and adults.	a. change the method of conducting themselves in a critical area. b. show improvement in general and specific critical areas. c. help to give constructive criticism of another's performance. d. accept constructive criticism without becoming discouraged and angry.
27. practice appropriate audience/ participant behavior while experiencing a production.	a. be polite, attentive, and informed members of an audience. b. be positive, enthusiastic, and prepared play participants.
28. recognize the attitude, discipline, knowledge, and skills required to pursue a career in theatre arts.	a. discuss the avocational value of a theatre background. b. explore the career opportunities in and among theatre, film, and television.

THEATRE ARTS
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 093600

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in the **theatre arts** at the middle/junior high school level, students should	Students will
Creative Movement and Pantomime	
1. apply physical techniques for creative expression.	a. use pantomime that encourages the use of the body, limbs, and facial expression. b. use improvisation that encourages the use of the body limbs, facial expression, vocal expression, dialogue, and movement.
Characterization	
2. use improvisation to develop various characters.	a. improvise characteristic actions of two or more characters. b. use a dialogue between two or more characters in a given situation.
3. apply and demonstrate an understanding of characterization techniques through movement, voice, costume, and makeup.	a. choose a scene from a play and perform it for a class.
4. apply vocal techniques for creative expression.	a. interpret a poem, humorous, dramatic, or oratorical reading that has been memorized focusing on vocal expression, pitch, rate, and rhythm to aid in interpretation.
Dramatic Form	
5. compare the relationship between theatre and real life experiences.	a. read plays that deal with real life situations. b. see productions of true-to-life plays.

Specific Proficiency Statements	Sample Indicators
6. evaluate the components of a theatrical production.	a. view a production staged by a high school, civic, college, university, or children's theatre group. b. discuss the performance with a knowledgeable theatre person.
7. apply and demonstrate an understanding of theatre arts vocabulary.	a. use theatre vocabulary when reading, rehearsing, performing, and evaluating theatre work.
8. construct and use scenic elements to enhance a production.	a. design and construct simple scenery for a production.
9. utilize properties to enhance a dramatic production.	a. produce, procure, and use the properties that are needed in any given production.
10. utilize lighting techniques to enhance a dramatic production.	a. use lighting to indicate the beginning or end of a scene. b. use lighting to set a mood. c. use lighting to spotlight a single performer. d. use lighting to show a particular playing area.
11. utilize appropriate sound techniques to enhance a dramatic production.	a. find appropriate music to set a given mood. b. find appropriate sounds for special effects.
12. utilize costumes to enhance characterizations in a dramatic production.	a. procure, produce, wear, and use costumes that are needed in a play.
13. utilize makeup to enhance characterizations in dramatic productions.	a. watch a knowledgeable theatre arts person apply various forms of makeup. b. wear character makeup. c. apply character makeup.

Specific Proficiency Statements	Sample Indicators
14. be involved in and demonstrate an understanding of how theatrical productions are enhanced through public relations.	a. conduct an advertising campaign through posters and newspapers. b. sell tickets. c. meet and talk with audience members. d. see that audience seating is well-organized for viewing a production.
15. demonstrate an understanding of the elements of dramatic literature, e.g., plot, setting, theme, mood, and conflict.	a. read scenes from plays. b. view productions of plays.
16. apply techniques such as movement, creating character, and voice to interpret dramatic material for audiences.	a. choose scenes. b. participate in one-act plays. c. learn and perform in duo speech humorous or dramatic readings.
17. apply production concepts and skills to stage scenes or one-act plays.	a. use sound, lighting, costume, makeup, and scenery to create an environment for the presentation.
18. view a live theatrical event and evaluate the performance.	a. see a performance. b. write a critique of the performance. c. read a critical review of the performance. d. compare personal feelings with those of the critic.
19. develop and maintain practical skills needed in dramatic productions.	a. work in a group to present a scene or play. b. memorize the dialogue. c. demonstrate the self-discipline required for rehearsal and presentation of a scene or play.
Sensitivity	
20. recognize the role of the director.	a. watch the rehearsal of a play focusing on the duties and responsibilities of the director. b. participate in a play with a qualified theatre arts director.

Specific Proficiency Statements	Sample Indicators
21. analyze and evaluate personal and group dramatic efforts.	a. discuss personal preferences. b. discuss possible improvements in the performance.
Integration of the Art Forms	
22. work with and demonstrate an understanding of the relationships and commonalities between theatre and other art forms.	a. use art, dance, and musical forms to aid in the interpretation of dramatic literature. b. demonstrate an awareness of the parallels among theatre arts and visual art, dance, and music.
23. recognize the attitude, discipline, knowledge, and skills required to pursue a career in theatre arts.	a. discuss the avocational value of a theatre background. b. explore the career opportunities in and among theatre, film, and television.

THEATRE ARTS
HIGH SCHOOL LEVEL

Proficiency List 094600

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in the **theatre arts** at the high school level, students should	Students will
Introduction to Theatre	
1. **comprehend and analyze the relationship between theatre and life experiences.**	a. demonstrate an understanding that theatre shows or tells stories based on universal emotions, experiences, and events.
2. **comprehend and analyze the relationships and commonalities between theatre and other arts.**	a. demonstrate an awareness of the parallels among theatre arts and visual art, dance, and music. b. demonstrate an understanding of the concepts involved by adapting one art form to another. c. adapt a script from a short story or poem. d. create a dramatic scene or pantomime based on a painting or selection of music.
3. **comprehend and analyze how theatre relates to other school and life experiences.**	a. recognize drama in a sports contest or other activity. b. work cooperatively with other classes. c. see the relationships between people and cultures.
Creative Movement and Pantomime	
4. **explore the use of movement and creative expression as steps toward characterization and acting.**	a. demonstrate an awareness of body parts, functions, and limitations. b. demonstrate an ability to relax, concentrate, and utilize effective warm-up techniques. c. use creative movement focusing on the use of space, energy, and temporal elements.
5. **observe how movement defines a character's environment.**	a. identify movements which communicate age, health, occupation, attitude, relationships, space, time, energy, self-concept, and socioeconomic status.

Specific Proficiency Statements	Sample Indicators
6. interpret and create a physical characterization based on acquired skills.	a. demonstrate physical characterizations using exercise, relaxation, concentration, and warm-up techniques.
7. evaluate their movements and the movements of others based on critical observation.	a. demonstrate an ability to evaluate movement based on criteria, such as individual creativity and honesty, effective expression, and audience believability.
8. explore the use of pantomime as a theatre art form and as a means to achieve characterization and acting.	a. discuss the history of pantomime. b. recognize the value of pantomime as an art form. c. demonstrate body awareness and limitations through relaxation, concentration, and warm-up techniques. d. use the entire body to move creatively focusing on the use of space, energy, and time. e. demonstrate three mime exercises, e.g., inclination, rotation, and isolation.
9. observe how environment can be defined through pantomime.	a. identify movements which communicate age, health, occupation, attitude, relationships, space, time, energy, self-concept, and socioeconomic status.
10. utilize relaxation, concentration, observation, and warm-up techniques in creative expression.	a. demonstrate the ability to perform mime exercises, e.g., inclinations, rotations, and isolations. b. create a theme using mime. c. demonstrate an ability to perform traditional mime, e.g., walks, rope pull, ladder and stair climbing.
11. evaluate pantomime performed by self and others.	a. demonstrate the ability to evaluate pantomime based on effective expression, audience believability, creativity and honesty of the mime, and precision of traditional mime movements.

Dialogue/Vocalization

12. use the voice creatively and expressively as a means of achieving characterization and acting.	a. demonstrate the ability to use vocal range in the creation of a character or characters. b. demonstrate a basic understanding of the vocal mechanism and its operation including respiration, phonation, resonation, articulation, and projection. c. use relaxation and warm-up techniques to improve vocalization.

Specific Proficiency Statements	Sample Indicators
13. **observe how to use the voice effectively as a means of defining the environment for a character.**	a. demonstrate vocal techniques which communicate age, health, occupation, relationships, space, time, geographic heritage, energy, self-concept, and socioeconomic status.
14. **use relaxation and warm-up techniques to improve creative expression.**	a. demonstrate the ability to evaluate creative vocal expression based on effective vocal expression, dialect believability, and appropriate use of the vocal mechanism.
15. **recognize the value of vocal expression.**	a. observe and recognize the expressive use of the voice by actors in films, television, recordings, and in live theatre productions. b. interpret prose and poetry through solo and group readings.

Sensory Perception and Concentration

16. **recognize the importance of sensory perception and concentration to acting.**	a. apply sensory awareness of sight, sound, smell, taste, and touch. b. recall sensory and emotional experiences. c. create characters using recalled experiences. d. develop a point of focus. e. concentrate in rehearsal and performance.

Improvisation

17. **explore and recognize the importance of improvisation to acting.**	a. participate in improvisation through theatre games to diminish inhibitions. b. involve the whole body during appropriate exercises. c. use impromptu storytelling and vocal characterizations. d. react spontaneously during scenes or activities.
18. **create vivid characterizations through the use of improvisation.**	a. communicate through the use of gestures, voice, physical traits, and improvised business. b. listen carefully, react spontaneously, and play for truth in the activity avoiding playing for laughs or plot devices. c. apply improvisation techniques as an effective rehearsal tool.

Specific Proficiency Statements	Sample Indicators
19. discuss their work and the work of others.	a. demonstrate an ability to question the believability of characterization. b. demonstrate an ability to question the effectiveness of observed techniques. c. incorporate suggestions into "improved" scenes.
Stage Movement	
20. recognize the relationship between stage movement and acting.	a. demonstrate an understanding of a variety of audience-actor configurations. b. demonstrate stage positions, body positions, and stage crosses. c. demonstrate an understanding of blocking directions. d. demonstrate stage business techniques and stage violence techniques.
Performance of Dramatic Literature	
21. recognize the use of body, voice, and mind working together to create effective characterization and acting.	a. demonstrate and utilize theatre vocabulary. b. develop methods of script interpretation and subtext interpretation. c. develop methods of character analysis related to the play as a whole and character motivation. d. explore and discuss theories of acting and period styles.
22. explore and demonstrate appropriate ensemble behavior in rehearsal and performance.	a. work as an ensemble demonstrating cooperative work on a scene or play. b. analyze, block, and rehearse a scene or production in a group setting.
23. analyze and evaluate personal and group rehearsals and performances.	a. discuss the rehearsal or performance based on objective criteria developed in class. b. discuss the success of the rehearsal or performance based on the playwright's intentions. c. respond positively to constructive criticism.

Specific Proficiency Statements	Sample Indicators
Appreciation of Dramatic Literature	
24. recognize, comprehend, and analyze the elements of a play script.	a. analyze scene descriptions and stage directions. b. analyze dialogues, asides, soliloquy, poetic dialogue, and realistic dialogue. c. recognize and analyze incident, rising action, climax, falling action, conclusion (denouement), protagonist, antagonist, theme.
25. recognize, comprehend, and analyze a variety of forms and styles in dramatic literature.	a. analyze and discuss a variety of dramatic forms including tragedy, melodrama, comedy, farce, tragicomedy, and musical theatre. b. analyze and discuss a variety of dramatic styles, e.g., classic, romantic, nationalistic, expressionistic.
26. recognize, comprehend, and analyze the major historical periods related to drama.	a. analyze and discuss historical periods including prehistoric theatre, Greek theatre, Roman theatre, Medieval theatre, Spanish and Elizabethian theatre, Italian Renaissance theatre, French classicism, 18th Century theatre, 19th Century theatre, Oriental theatre, and 20th Century theatre.
Theatrical Production	
27. comprehend the interdependence of performing and the technical elements in a theatrical production.	a. demonstrate an understanding of the organization of a theatre company. b. demonstrate the use of appropriate theatre vocabulary. c. plan and budget a production schedule. d. apply audition techniques, skills, rehearsal procedures, performance procedures, and strike procedures.
Technical Theatre	
28. recognize, analyze, and comprehend the use of scenic elements to enhance dramatic activities.	a. demonstrate an understanding of the elements and functions of traditional and nontraditional forms of scenery. b. demonstrate the use of elevations, floor plans, and models.

Specific Proficiency Statements	Sample Indicators
	c. demonstrate the use of elements of art in technical theatre, such as shape, form, color, texture, line. d. interpret a script related to period, style, and mood.
29. recognize, comprehend, and analyze scenic design and construction techniques for scenery.	a. demonstrate the ability to interpret plans for scenic elements. b. demonstrate a knowledge of tools, equipment, and materials used in set construction. c. demonstrate scenic construction techniques and painting techniques. d. practice scenic mounting and shifting techniques. e. employ safety procedures. f. coordinate scenery construction with other members of the production team compatible with space and budget.
Properties	
30. recognize, comprehend, and analyze the use of properties to enhance dramatic activities.	a. recognize the different types of props including hand props, set decoration, and practical props. b. use the elements of art, such as form, shape, line, color, and texture related to properties. c. interpret the period, style, and mood of the theatrical event and relate these elements to the properties required for the production. d. create drawings and pictures of the types of props needed for a production. e. coordinate the plans for properties with other members of the production team compatible with space and budget. f. construct, acquire, organize, and return the props used for a production. g. evaluate the effective use of props in the theatrical event based on their quality and function related to concepts learned, the cast, technicians, and the audience or adjudicator. h. demonstrate an understanding of safety procedures.

Specific Proficiency Statements	Sample Indicators
Lighting	
31. recognize, comprehend, and analyze the use of lighting to enhance dramatic activities.	a. demonstrate an understanding of the elements of lighting related to color, intensity, distribution, and composition. b. demonstrate an understanding of the source and motivation for lighting. c. identify the different forms of lighting control formats. d. analyze the use of lighting for a production related to style, period, and mood. e. use art elements to create the appropriate atmosphere for the production. f. use light plots and designs to communicate lighting concepts with other members of the production team. g. demonstrate a basic knowledge of electricity. h. demonstrate how to hang, focus, and gel lighting instruments to achieve the appropriate atmosphere for the production. i. utilize appropriate care and safety procedures related to lighting instruments. j. evaluate the effective use of theatre lighting based on its quality and function related to the atmosphere of the production and to the perceptions of the audience or adjudicator.
Sound	
32. recognize, comprehend, and analyze the use of sound to enhance dramatic activities.	a. demonstrate an understanding of the basic elements and physics of sound including room acoustics. b. recognize the equipment and methods used in sound reinforcement and in the creation of sound effects. c. analyze the production related to sound reinforcement and sound effects. d. determine the duration, volume, and location of sound effects needed. e. determine the source of the sound effect (pre-recorded or created acoustically during the performance). f. use sound sheets to communicate the application of sound in the production. g. evaluate the effective use of sound based on its quality and function related to the atmosphere of the production and to the perceptions of the audience or adjudicator.

Specific Proficiency Statements	Sample Indicators
Costumes	
33. recognize, comprehend, and analyze the use of costumes to enhance dramatic productions.	a. demonstrate an understanding of costumes including design, construction, use of materials, and use of equipment. b. use art elements related to theatre costumes, e.g., shape, form, line, color, and texture. c. analyze the period, style, and mood of the production related to costuming. d. recognize the relationship between costumes and the actor's ability to create a character effectively. e. use art elements, renderings, and models to communicate the costume concept for the production to other members of the production team. f. communicate the costume concept with other members of the production team compatible with space and budget. g. interpret plans, renderings, and models for costume construction. h. demonstrate a working knowledge of tools, equipment, materials, and sources used in costume construction and maintenance. i. assist cast members with costume changes, maintain and care for costumes during and after the production. j. evaluate the effective use of costumes related to style and mood. k. evaluate the effective use of costumes based on the atmosphere of the production and the perceptions of the audience or adjudicator.
Makeup	
34. recognize, comprehend, and analyze the use of makeup to enhance dramatic activity.	a. identify the elements, function, and styles of makeup. b. recognize the principles of makeup application including foundation, shadow, highlight, rouge, powder, liners, wigs and beards, prosthetics, and special effects. c. use drawings and written descriptions as a makeup plot based on the director's interpretation of the production, art elements, the style of the event, theatrical space, lighting, costumes, actors, script, budget, available time, and available supplies. d. use appropriate vocabulary, tools, equipment, and safety procedures.

Specific Proficiency Statements	**Sample Indicators**
	e. recognize the differences and unique demands placed on makeup used for the street, theatre, film, and television. f. demonstrate an understanding of the relationship between makeup and an actor's ability to create a character effectively. g. evaluate the effective use of makeup based on the atmosphere of the production and the perceptions of the audience or adjudicator.
Public Relations	
35. recognize, comprehend, and analyze the effective use of public relations to enhance a dramatic production.	a. demonstrate an understanding of the elements, function, and styles of public relations. b. identify the requirement for various publicity outlets. c. assemble publicity information. d. apply publicity design procedures for posters and programs for the production. e. recognize public relations procedures related to ticket sales and house management. f. communicate the public relations concept compatible with the budget of the production with other members of the production team. g. use the appropriate vocabulary, tools, equipment, and safety procedures. h. evaluate the effective use of public relations related to the production and to the perceptions of the audience or adjudicator.
Design	
36. recognize, comprehend, and analyze the use and relationship of design to a dramatic production.	a. demonstrate an understanding of the elements, function, styles, and historical development of theatre design. b. use appropriate vocabulary, tools, equipment, and safety procedures. c. communicate the design concept compatible with space and budget with other members of the production team. d. evaluate the effective use of design related to the atmosphere of the production and to the perceptions of the audience or adjudicator.

Specific Proficiency Statements	Sample Indicators
Directing	
37. recognize, comprehend, and analyze the relationship of directing to theatre.	a. demonstrate an understanding of the historical development of directing. b. develop a production concept for a play related to style, period, and mood. c. interact and work effectively with cast members and other members of the production team. d. demonstrate skills in script selection, play analysis, casting a production, rehearsal techniques, and performance related to directing. e. evaluate effective directing related to the atmosphere of the production and to the audience or adjudicator.
Playwriting	
38. recognize the relationship between playwriting and theatre.	a. identify the different styles of theatre. b. demonstrate the appropriate use of the English language.
39. analyze and apply the elements of a play script.	a. demonstrate an understanding of the setting, plot, character(s), dialogue, theme, spectacle.
40. demonstrate an awareness of the different sources of material for a play script.	a. use observations, life experiences, literature, history, and imagination to evaluate material for a play script.
41. write a script for a play.	a. apply improvisational techniques in playwriting. b. dramatize an existing story. c. create an original drama.
42. experience a production of their original scripts.	a. demonstrate an understanding of the rehearsal process, including a rewrite of the script during the rehearsal process. b. communicate effectively with the cast, director, and other members of the production team. c. evaluate the effectiveness of the script based on its quality and function related to the atmosphere of the production and to the perceptions of the audience or adjudicator.

Specific Proficiency Statements	**Sample Indicators**
Career Opportunities	
43. recognize the attitude, discipline, knowledge, and skills required to pursue a career in theatre arts.	a. discuss the avocational value of a theatre background. b. explore the career opportunities in and among theatre, film, and television.
SPECIALIZED THEATRICAL MODES	
Storytelling	
44. recognize the value of storytelling to theatre.	a. demonstrate an understanding of the historical development of storytelling. b. identify source materials, styles, and performance techniques used in storytelling. c. apply storytelling techniques by selecting, preparing, and telling a story. d. evaluate effective storytelling based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Creative Drama	
45. recognize the relationship between creative drama and theatre.	a. identify source material, theories, and styles of creative drama. b. demonstrate or stage a creative dramatization. c. evaluate the effectiveness of the creative drama process based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Puppetry	
46. recognize the relationship between puppetry and theatre.	a. demonstrate an understanding of the historical development of puppetry. b. identify source material, theories, and styles of puppetry. c. evaluate effective puppetry based on its quality and function related to the production and to the perceptions of the audience or adjudicator.

Specific Proficiency Statements	**Sample Indicators**
Reader's Theatre	
47. recognize the relationship between reader's theatre and theatre.	a. identify source material, theories, and styles of reader's theatre. b. apply performance techniques in a reader's theatre production. c. evaluate the effectiveness of the reader's theatre process based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Theatre for Children	
48. recognize the relationship between children's theatre and theatre.	a. demonstrate an understanding of the historical development of children's theatre. b. identify source material, theories, and styles of children's theatre. c. demonstrate and apply children's theatre performance techniques. d. evaluate the effectiveness of the children's theatre process based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Masked Theatre	
49. recognize the relationship between masked theatre and theatre.	a. demonstrate an understanding of the historical development of masked theatre. b. apply mask construction techniques. c. utilize masks for actor training applications. d. demonstrate and apply masked theatre performance techniques. e. evaluate the effectiveness of the masked theatre process based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Dance Drama	
50. recognize the relationship between dance drama and theatre.	a. demonstrate an understanding of the historical development of dance. b. identify source materials, theories, and styles of dance.

Specific Proficiency Statements	**Sample Indicators**
	c. apply dance rehearsal and performance techniques in a choreograpned selection. d. evaluate the effectiveness of the dance process based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Musical Theatre	
51. recognize the relationship between musical theatre and theatre.	a. demonstrate an understanding of the historical development of musical theatre. b. identify source materials, theories, and styles of musical theatre. c. apply performance techniques in a musical theatre production. d. evaluate the effectiveness of the musical theatre production based on its quality and function related to the production and to the perceptions of the audience or adjudicator.
Radio/Television/Film	
52. recognize the relationship between radio/television/film and theatre.	a. demonstrate an understanding of the historical development of radio/television/film. b. identify source material, theories, and styles of radio/television/film. c. apply performance techniques in radio/television/film. d. use appropriate vocabulary, tools, equipment, and safety procedures. e. evaluate the effectiveness of the radio/television/film based on its quality and function related to the production and to the perceptions of the audience or adjudicator.

FOUNDATION PROFICIENCY STATEMENTS - CREATIVE MOVEMENT/DANCE

List 090500

Students in Indiana schools will be provided learning experiences in **creative movement** and **dance** which allow them to:

1. express personal feelings, ideas, and values through dance by exploring, creating, organizing, and/or performing.

2. perceive, identify, describe, and analyze the distinguishing characteristics of form, structure, and style in a variety of dance forms.

3. know the role that dance has played and continues to play in the lives of people and how past and present societies have expressed their values and beliefs through dance from historical and cultural contexts.

4. experience professional dance works and evaluate their content based on critical perception and analysis.

5. develop a lifelong commitment to dance, value its physical, mental, and social regards, its importance in the life of the community, and develop the ability to continue dance education independently either through recreational, professional, or consumer activities.

CREATIVE MOVEMENT/DANCE EDUCATION SKILL AREAS

The following skills should be included for each instructional level and setting.

DESCRIBING

The skills of perceiving, interpreting, and demonstrating understanding of movement through one or more of the following:

1. Verbal description, including both abstract imagery and technical terminology.
2. Physical description, including imitation and creation.
3. Visual description, including diagrams, traditional and nontraditional notation.
4. Historical description, including chronological context and cultural relevance.

ORGANIZING (Process)

The skills of effectively using time, space, and energy in this sequence:

1. The exploration of movement ideas through improvisation.
2. The manipulation of those movement ideas.
3. The arrangement of those movement ideas.
4. The embellishment of those movement ideas with accompaniment and/or visual imagery.
5. The teaching of this arrangement to performer(s).
6. The fusion of these arrangements (choreography) with the artistic intent.

PRODUCING

The skills related to the presentation of the choreography:

1. Exploration of production elements (lights, costumes, sets, accompaniment, and special effects) environmental resources.
2. Design of those elements.
3. The implementation of those elements.

The skills related to the promotion of dance production:

1. Explore the promotional elements of marketing a dance production.
2. Develop promotional strategies.
3. Design promotional materials.
4. Distribution of promotional materials.

EVALUATING

The skills related to the critical review of tne process and production of dance performed by oneself or others through:

1. Observation.
2. Analysis.
3. Comparison.
4. Conclusion.
5. Appreciation.

CREATIVE MOVEMENT
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 091500

NOTE: The use of videotape to evaluate the effective use of Body Movement, Time, Space, Energy, Imagery, and Dance Composition as they relate to the individual and group is an indispensible tool and is encouraged at all levels of instruction.

Body Movement

Definition: **Body Movement** combines body awareness and body mechanics.

Elements:
1. **Body Parts**
2. **Axial Movement** - movement that stays in one place
3. **Locomotor Movement** - movement that travels from one place to another

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
1. **demonstrate a knowledge of body parts through axial and locomotor movement.**	a. isolate each body part and move it in different ways. b. demonstrate knowledge of axial movement upon verbal cue, i.e., reach, twist, pull, fold, etc. c. perform different axial movements in succession. d. demonstrate knowledge of locomotor movement upon verbal cue, i.e., walk, run, hop, jump, skip. e. imitate the shape and movement of others. f. move with one other person in ways that are alike and different. g. mirror the movements of another person. h. combine locomotor and axial movements in succession.

Time

Definition: **Time** is the system for measuring changes in sights, sounds, and movement.

Elements:
1. **Tempo** - denotes the speed of movement or music
2. **Beat** - the basic pulse underlying movement or music
3. **Rhythm** - the organization of movement or sounds into groups
4. **Duration** - length of movement and/or nonmovement in relation to the pulse
5. **Accent** - emphasis or stress on a movement or part of a movement.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
2. identify, imitate, and create movement which utilizes temporal elements.	a. give examples of things that move slowly or fast. b. imitate those things through movement. c. create movements that are slow and fast. d. move to a steady beat. e. count the number of beats in a movement. f. create movement within a given time frame, i.e., four beats, eight beats. g. imitate a rhythmic pattern through sound and movement. h. explain where the accent happens within a group of movements. i. create movements with accents.

Space

Definition: **Space** is the area which the body occupies and designs as well as the area in which movement takes place.

Elements:

1. **Shape** - outline of the body in a given position.
   Shape includes the occupied and unoccupied space of the body.
2. **Level** - gradation of height from the lowest to the highest.
   Levels may be varied in space by different body positions and body parts.
3. **Dimension** - size of movement(s)

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
3. identify, imitate, and create spatial elements through movement.	a. create shapes that show unoccupied space. b. create shapes that show the difference between high and low level. c. create shapes that show the difference between large and small. d. create movements that show the difference between large and small, high and low. e. create shapes and movements that combine low and high with big and small, e.g., low and big, low and small, high and big. f. move to another place in the room in many different ways using shapes and movements showing level and dimension changes. g. travel with another person to a new place in the room showing many different levels and sizes.

Energy

Definition: **Energy** is the force or power needed to produce and/or manipulate movement. Energy also relates to the quality of a movement.

Elements:
1. **Degree** - amount of force used. It can vary from light to strong.
2. **Quality** - manner in which energy is applied, continued, and arrested including:

    a) **Sustained movement** - steady and continuous movement marked by the equalization of force and by the fusion of impulse and follow-through.
    b) **Pendular movement** - swinging and unrestricted movement characterized by a marked impulse and an unrestrained follow-through.
    c) **Percussive movement** - sharp, forceful, and ballistic movement with a marked initial impetus which is quickly checked on the follow-through.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
4. identify, imitate, and express qualities and degrees of movement.	a. give examples of objects or things that move in a sustained, pendular, and percussive manner. b. imitate those objects through body movement. c. create movements that show the difference between sustained, pendular, and percussive motion. d. give examples of objects or things that move in a light or strong manner. e. imitate those objects through body movements. f. create movements that show the differences between light or strong. g. demonstrate movements that progress gradually from light to strong and strong to light. h. recognize and label the qualities of movement. i. recognize and describe that degree of force used in the qualities of movement.

Imagery

Definition: **Imagery** is the representation of a mental picture.

Elements:
1. **Moods** - emotions or feelings
2. **Natural Environment**
3. **Literature** - written and oral

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
5. translate ideas, both concrete and abstract, into movements demonstrating individual expressive attitudes.	a. demonstrate body movements as a personal response to suggested moods and feelings. b. create shapes and movement phrases about moods and feelings. c. improvise movements to music and sounds that express different moods and feelings. d. arrange movements in a sequence of events taken from nature, such as plant growth, thunderstorm. e. create a shape with others to depict an image from nature, such as a tree, rock, mountain. f. develop movement ideas that reinforce story comprehension. g. develop a relationship between words and movement, e.g., think wind-do wind movements; think house-form a house with bodies; think go-travel to another place in the room.

Dance Composition

Definition: **Composition** is the translation of ideas and/or experiences expressed through movement to create a dance.

Elements:
1. **Improvisation** - immediate and spontaneous responses to a direction
2. **Design** - selection of movement choices
3. **Form** - overall plan for the arrangement of movement

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at kindergarten through grade three, students should	Students will
6. demonstrate a knowledge of composition through the creation of a movement study.	a. translate music, words, or sound into movement. b. improvise movement based on the elements of time, space, energy, and imagery. c. sequence movements into a phrase. d. memorize original and existing movement sequences. e. develop a repeated movement pattern. f. translate a visual design, such as line or shape into movement. g. organize movement phrases into a choreographic form, e.g., AB or ABA. h. demonstrate original movement study. i. view selected dance compositions by professional dancers focusing on the elements of composition.

CREATIVE MOVEMENT
UPPER ELEMENTARY LEVEL

Proficiency List 092500

NOTE: The use of videotape to evaluate the effective use of Body Movement, Time, Space, Energy, Imagery, and Dance Composition as they relate to the individual and group is an indispensible tool and is encouraged at all levels of instruction.

Body Movement

Definition: **Body Movement** combines awareness and body mechanics.

Elements:
1. **Body Parts**
2. **Axial Movement** - movement that stays in one place
3. **Locomotor Movement** - movement that travels from one place to another

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
1. demonstrate a knowledge of body parts through axial and locomotor movement.	a. isolate each body part and move it in different ways. b. demonstrate knowledge of axial movement upon verbal cue, i.e., reach, twist, pull, fold, etc. c. perform different axial movements in succession. d. perform more than one axial movement at the same time. e. demonstrate a knowledge of locomotor movement upon verbal cue, i.e., walk, run, hop, jump, skip. f. create a sequence of locomotor movements. g. combine locomotor and axial movements simultaneously. h. combine locomotor and axial movements in succession. i. create a movement pattern using locomotor and axial movements, teach it to another person, and perform it together. j. imitate the shape and movement of others. k. move with one other person in ways that are alike and different. l. mirror the movements of another person.

Time

Definition: **Time** is the system for measuring change in sights, sounds, and movements.

Elements:
1. **Tempo** - denotes the speed of movement or music
2. **Beat** - the basic pulse underlying movement or music
3. **Rhythm** - the organization of movement or sound into groups
4. **Duration** - length of movement and/or nonmovement in relation to the pulse
5. **Accent** - emphasis or stress on a movement or part of a movement
6. **Meter** - the grouping of beats by measures

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
2. **identify, imitate, and create movement utilizing temporal elements.**	a. create movements that change speed from very slow to very fast and changing gradually to changing quickly. b. count the number of beats within a movement phrase. c. move to a steady beat both in time and independently of the beat. d. give movement examples of duple and triple meter demonstrating weak and strong beats. e. demonstrate nonmovement spaced in between movements. f. imitate and memorize movement phrases of different lengths. g. create a movement phrase utilizing temporal elements. h. give accents to movements within a movement phrase and change the accents to fall on another movement in the same phrase. i. imitate and memorize a rhythmic pattern through sound and movement. j. create a rhythmic movement pattern.

Space

Definition: **Space** is the area which the body occupies and designs as well as the area in which movement takes place.

Elements:

1. **Shape** - outline of the body in a given position. Shape includes the occupied and unoccupied space of the body.
2. **Level** - gradation of height from the lowest to the highest. Levels may be varied in space by different body positions and body parts.
3. **Direction** - the point toward which one faces or points and/or the line along which one moves or lies.
4. **Dimension** - size of movement(s).
5. **Design** - placement of a) the dancer(s), b) the dancer(s)' movements, and c) the path the dancer(s) travel, such as floor design.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
3. **identify, imitate, and create spatial elements through movement.**	a. create shapes that show unoccupied space. b. create shapes with another person and with small groups that emphasize unoccupied space. c. describe the outline of body parts and the whole body while in a space (either unoccupied or occupied). d. create movements that show low to high levels in constant motion. e. create movements that show big to small in constant motion. f. change a given movement's direction, level, and size. g. combine shapes and movements that emphasize level, size, and direction. h. design and draw the floor design, i.e., the way dancers will travel across the floor, and demonstrate it through movement. i. place dancers in a given space to show symmetrical and asymmetrical designs. j. use props to define given space.

Energy

Definition: **Energy** is the force or power needed to produce and/or manipulate movement. It is also the quality of a movement.

Elements:
1. **Degree** - the amount of force used. It can vary from light to strong and relaxed to intense.
2. **Quality** - the manner in which energy is applied, continued, and arrested including:

    a) **Sustained movement** - steady and continuous movement marked by the equalization of force and by the fusion of impulse.
    b) **Pendular movement** - swinging and unrestricted movement characterized by a marked impulse and unrestrained follow-through.
    c) **Vibratory movement** - shaking, tremulous movement.
    d) **Suspended movement** - movement initiated by a marked impulse and continuing until the peak of elevation is achieved with a momentary arrestment of movement. Thus, the movement is prolonged, producing the effect of hanging in space without relationship to gravity.
    e) **Percussive movement** - sharp, forceful, and ballistic movement with a marked initial impulse which is quickly checked on the follow-through.
    f) **Collapse** - a release of energy in any part of the body causing it to fall.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
4. identify, imitate, and express qualities and degrees of movement.	a. list examples of objects or things that move in a pendular, percussive, sustained, vibratory, or suspended manner. b. imitate, through movement, examples of objects. c. create movements that show the difference between pendular, percussive, sustained, vibratory, or suspended manner. d. give examples of objects or things that move in a light, strong, relaxed, or intense manner. e. imitate, through movement, examples of the above objects. f. create movements that show the difference between light, strong, relaxed, and intense. g. demonstrate movements that progress gradually from light to strong and strong to light, relaxed to intense, and intense to relaxed. h. recognize and describe the degree of force used in the qualities of movement. i. recognize and label the qualities of movement.

Imagery

Definition: **Imagery** is the representation of a mental picture.

Elements:
1. **Moods** - emotions or feelings
2. **Natural Environment**
3. **Literature** both oral and written
4. **Sound** - music and nonmusic
5. **Physical Environment**
6. **Visual Design**

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
5. translate concrete and abstract ideas into movement demonstrating individual expressive attitudes.	a. demonstrate body movements as a personal response to selected moods and feelings. b. create movements that represent objects and actions depicted in nature. c. develop a movement theme from a story or poem. d. embellish a movement idea with selected sounds/music either from live performance or a recording. e. design and perform a sequence of movement phrases that represent one or more of the imagery elements. f. discriminate between concrete and abstract ideas developing nonverbal descriptions. g. improvise shapes and movements to qualities of our physical environment. h. create imaginary ideas for objects and how they move. i. create a movement sequence depicting a visual design, e.g., a line, triangle, arch, circle, and combinations of designs.

Dance Composition

Definition: **Composition** is the translation of ideas and/or experiences expressed through movement to form a dance.

Elements:
1. **Improvisation** - immediate and spontaneous response to a direction
2. **Design** - the selection of movement choices
3. **Form** - the overall plan for the arrangement of movement
4. **Embellishment** - adding music, sound, costume, etc.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the upper elementary level, students should	Students will
6. demonstrate a knowledge of composition through the creation of a movement study.	a. translate music, words, and sounds into movement. b. improvise movement based on temporal elements, space, energy, imagery, and body movement. c. create a movement and make several variations of it. d. memorize original and existing movement sequences. e. sequence movement into phrases. f. organize movement phrases into a choreographic form, e.g., A3, ABA, or Canon. g. select special effects to accompany a dance, e.g., costumes, music, lights, props. h. arrange a dance study using a variety of stage positions. i. identify and demonstrate stage directions, e.g., stage right and left, down, up. j. explain a personal interpretation of dance. k. view selected dance compositions by professional dancers focusing on the elements of composition.

CREATIVE MOVEMENT
MIDDLE/JUNIOR HIGH SCHOOL & HIGH SCHOOL LEVELS

Proficiency List 093500

NOTE: The use of videotape to evaluate the effective use of Body Movement, Time, Space, Energy, Imagery, and Dance Composition as they relate to the individual and group is an indispensible tool and is encouraged at all levels of instruction.

Body Movement

Definition: **Body Movement** combines body awareness and body mechanics.

Elements:
1. **Body Parts**
2. **Axial Movement** - movement that stays in one place
3. **Locomotor Movement** - movement that travels from one place to another

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
1. demonstrate a knowledge of the mechanics of the body through axial and locomotor movement.	a. isolate each body part and move it in different ways. b. demonstrate knowledge of axial movement upon verbal cue, i.e., reach, twist, pull, fold. c. perform different axial movements in succession. d. perform more than one axial movement at the same time. e. demonstrate a knowledge of locomotor movement upon verbal cue, i.e., walk, run, hop, jump, skip. f. combine locomotor and axial movement simultaneously and in succession. g. create a movement pattern using locomotor and axial movements, teach it to another person, and perform it together. h. imitate the shape and movement of others. i. move with one other person in ways that are alike and different. j. mirror the movement of another person. k. identify muscles and muscle groups and their functions related to movement, e.g., flexion, extension, and rotation.

Time

Definition: **Time** is the system for measuring change in sights, sounds, and movement.

Elements:
1. **Tempo** - denotes the speed of movement or music
2. **Beat** - the basic pulse underlying movement or music
3. **Rhythm** - the organization of movement or sounds into groups
4. **Duration** - length of movement and/or nonmovement in relation to the pulse
5. **Accent** - emphasis of stress on a movement or part of a movement
6. **Meter** - groupings of beats by measures

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
2. identify, imitate, and create movement utilizing temporal elements.	a. vary the speed of a movement phrase. b. create a movement phrase with varying speeds. c. move to a steady beat and against the beat. d. create a movement phrase that includes no motion. e. give accents to movements within a movement phrase. f. give movement examples of duple and triple meter. g. create a movement phrase that corresponds to a given rhythm. h. create a movement phrase utilizing temporal elements. i. imitate and memorize a rhythmic pattern through sound and movement. j. create a rhythmic movement pattern and teach it to others.

Space

Definition: **Space** is the area which the body occupies and designs as well as the area in which movement takes place.

Elements:

1. **Shape** - outline of the body in a given position. Shape includes the occupied space of the body.
2. **Level** - gradation of height from the lowest to the highest. Levels may be varied in space by different body positions and body parts.
3. **Dimension** - size of movement(s).
4. **Design** - placement of the a) dancer(s), b) dancer(s)' movements, and c) path the dancer(s) travel, i.e., the floor design.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
3. identify, imitate, and create spatial elements through movement.	a. create shapes that show unoccupied and occupied space. b. create shapes with another person and in small groups that emphasize unoccupied and occupied space. c. change a given movement's direction, level, and size. d. create a movement study using the elements of space, teach it to another person, and perform it together. e. imitate the shape and movement of others. f. design and draw the floor design that a movement study travels, teach it to another person, and perform it together. g. create a movement study and teach it to a small group - design a) the placement of dancers on a given stage b) the movements of the dancers including levels, direction, and size, and c) the path that the dancers travel.

Energy

Definition: **Energy** is the force or power needed to produce and/or manipulate movement. Energy also relates to the quality of a movement.

Elements:

1. **Degree** - the amount of force used. It can vary from light to strong and from relaxed to intense.
2. **Quality** - the manner in which energy is applied, continued, and arrested including:

    a. **Sustained movement** - steady and continuous movement marked by the equalization of force and by the fusion of impulse.
    b. **Pendular movement** - swinging and unrestricted movement characterized by a marked impulse and an unrestrained follow-through.
    c. **Percussive movement** - sharp, forceful, and ballistic movement with a marked impulse which is quickly checked on the follow-through.
    d. **Vibratory movement** - shaking, tremulous movement.
    e. **Suspended movement** - initiated by a marked impulse and continuing until the peak of elevation is achieved with a momentary arrestment of movement. Thus, the movement is prolonged, producing the effect of hanging in air without relationship to gravity.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
4. identify, imitate, and express qualities and degrees of motion.	a. imitate the movement qualities of a given movement phrase. b. change the degrees of energy of a movement phrase. c. change the quality of a given movement. d. create a movement phrase that contains elements of energy. e. recognize and describe the degree of force used in the qualities of movement. f. recognize and label the qualities of movement.

Imagery

Definition: **Imagery** is the representation of a mental picture.

Elements:
1. **Moods** - emotions or feelings
2. **Natural environment**
3. **Literature** - written and oral
4. **Sound** - music and nonmusic
5. **Physical environment**
6. **Visual design**

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
5. translate concrete and abstract ideas into movement demonstrating individual expressive attitudes.	a. demonstrate body movements as a personal response to selected moods and/or feelings.
	b. create movements that represent objects and actions depicted in nature.
	c. develop a movement theme taken from a story or poem.
	d. embellish a movement idea with selected sounds and/or original or recorded music.
	e. design and perform a sequence of movement phrases that represent one or more of the imagery elements.
	f. discriminate between concrete and abstract ideas developing nonverbal descriptions.
	g. improvise shapes and movements to qualities of our physical environment.
	h. create a movement sequence depicting a visual design, e.g., a line, triangle, arch, or circle and combinations of designs.
	i. describe what imagery is elicited from selected music, sounds, movement, visual designs, and literature.

Dance Composition

Definition: **Composition** is the translation of ideas and/or experiences expressed through movement to form a dance.

Elements:

1. **Improvisation** - immediate and spontaneous responses to a direction
2. **Design** - selection of movement choices
3. **Form** - overall plan for the arrangement of movement/dance
4. **Embellishment** - adding music, sound, costumes, props, etc.
5. **Production** - technical skills for staging a concert

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **creative movement** at the middle/junior high school and high school levels, students should	Students will
6. demonstrate a knowledge of composition through the creation of a movement study and/or dance.	a. improvise movement based on the temporal elements, space, energy, imagery, and body movement. b. create a movement and make several variations on it. c. memorize original and existing movement sequences. d. sequence movement into phrases. e. organize movement phrases into choreographic form, e.g., AB, ABA, ABC, Rondo, Serial, Canon, Theme and Variation. f. select music appropriate to choreographic intent. g. select special effects to accompany the dance, e.g., costumes, music, lights, and props. h. arrange a dance study using a variety of stage positions. i. identify and demonstrate stage directions, e.g., stage left, right, down, and up. j. explain a personal interpretation of a dance. k. perform a solo movement study. l. choreograph and perform a study with others, e.g., a duet, trio, or quartet. m. design and construct stage sets, costumes, background and environments for the choreography. n. develop business skills necessary to promote and market a dance concert, e.g., the design and distribution of promotional material. o. record all music for a concert onto a master tape. p. design a plan or schedule for technical work, e.g., hanging lights, setting light levels, setting light cues, dress rehearsal procedures. q. view selected dance compositions by professionals dancers focusing on the elements of composition.

DANCE TECHNIQUE
MIDDLE/JUNIOR HIGH SCHOOL & HIGH SCHOOL LEVELS

Ballet, Modern, Ethnic, Jazz, Tap

Each study of dance presented should be taught by qualified dance instructors. These dance instructors should develop a dance curriculum specific to the style studied addressing the indicators presented below.

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **dance** at the middle/junior high school and high school levels, students should	Students will
1. **demonstrate the prescribed dance movements of a given form.**	a. explain and perform the proper body mechanics and body alignment for the prescribed dance movements. b. develop and refine movement skills. c. develop partnering skills. d. imitate slow/fast combinations to music. e. perform in groups. f. memorize established repertoire, as well as new choreography. g. perform in class and on stage. h. maintain a self-evaluation system. i. move rhythmically to the selected musical accompaniment. j. demonstrate appropriate dance attire and protocol for dance class. k. develop a personal aesthetic quality of moving.

DANCE APPRECIATION
MIDDLE/JUNIOR HIGH SCHOOL & HIGH SCHOOL LEVELS

The Historical Development of Dance

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **dance appreciation** at the middle/junior high school and high school levels, students should	Students will
1. be knowledgeable about different dance styles and their historical development and be able to critique dance performances.	a. recognize the historical perspective in which dance evolved. b. recognize examples of dance styles through visual or written description. c. explain why dance styles developed during specific historical periods. d. identify prominent dancers/choreographers from visual or written description. e. experience two or more styles of dance given technical instruction. f. compare dance to other art forms. g. develop criteria for performance evaluation. h. attend a professional dance concert and evaluate the concert based on critical perception and analysis. i. compare dance styles. j. view selected dance compositions focusing on their historical perspectives.

GLOSSARY OF DANCE-RELATED TERMS

Accent: Emphasis or stress on a movement or part of a movement.

Aesthetics: Study or philosophy of art and beauty.

Axial Movement: Nonlocomotor movement; movement that stays in one place.

Beat: Regularly spaced pulse.

Body Movement: Combination of body awareness and body mechanics.

Canon Form: Movement phrases repeated in intervals by more than one person.

Choreography: The art of composing dances.

Composition: Translation of ideas/experiences expressed through movement to form a dance.

Degree: Amount of force used to achieve motion.

Design: Placement of the dancer(s), of the dancer(s)' movements, and the path the dancer(s) travel.

Dimension: Size of movement(s).

Direction: Point toward which one faces or points and/or the line along which one moves or lies.

Downstage: The area of the stage closest to the audience.

Duple Meter: Alternation of one strong and one weak beat.

Duration: Length of movement and/or nonmovement in relation to the pulse.

Embellishment: To improve by adding details such as music, sound, costumes, props, etc.

Energy: The force or power needed to produce and/or manipulate movement; also the quality of a movement.

Floor Design: The path the dancer(s) travel.

Focus: The conscious attention toward a certain point; could be with eyes, body part(s), or the direction the whole body faces.

Form: An overall plan for arrangement of movement/dance.

GLOSSARY OF DANCE-RELATED TERMS

Imagery: The representation of a mental picture.

Improvisation: Immediate and spontaneous response to a direction.

Interpretation: The expression of a person's conception of a work of art.

Isolation: To move one body part at a time.

Level: Gradation of height from the lowest to the highest; levels may be varied in space by different body positions and body parts.

Locomotor Movement: Movement that travels from one place to another.

Meter: The grouping of beats by measures.

Moods: Feelings or emotions (angry, happy, sad, bored, scared, etc.).

Movement Pattern: An uninterrupted succession of related movements grouped to form an entire design.

Movement Theme: The development of one or more movement phrases to project a specific idea, emotion, characterization, etc.

Natural Environment: Arising from natural surroundings or phenomena.

Nonlocomotor Movement: Movements that stay in one place.

Occupied Space: The space which the body, objects, or things take up.

Pendular Movement: Swinging and unrestricted type of movement characterized by a marked impulse and an unrestricted follow-through.

Percussive Movement: A sharp, forceful, and ballistic type of movement with a marked initial impetus which is quickly checked on the follow-through.

Performance: Skillful presentation in which communication occurs; to execute an action or process.

Physical Environment: Arising from man-made surroundings.

Production: The technical skills for staging a concert.

Quality: Manner in which energy is applied, continued, and arrested.

GLOSSARY OF DANCE-RELATED TERMS

Repetition: That which repeats in order.

Rhythm: Regularly repeated movements.

Rhythmic Pattern: A grouping of rhythmic movements developed in consecutive order.

Rondo Form: A form in which a principal theme occurs several times with contrasting themes placed between the principal theme; A, B, A, C, A, D, A.

Sequence: The orderly, progressive placement of movements.

Shapes: Outline of the body in a given position.

Sound: Any noise, i.e., words, music, tones, etc.

Space: The area which the body occupies and designs as well as the area in which movement takes place.

Stage Left: The area of the stage to the left of center as the dancer faces the audience.

Stage Right: The area of the stage to the right of center as the dancer faces the audience.

Suspended Movement: Initiated by a marked impulse and continuing until the peak of elevation is achieved with a momentary arrestment of movement. Thus, the movement is prolonged, producing the effect of hanging in air without relationship to gravity.

Sustained Movement: Steady and continuous type of movement marked by the equalization of force and by the fusion of impulse.

Technique: The study of the skills needed to perform a certain form of dance.

Tempo: The rate of speed.

Theme and Variation: The introduction of an initial statement in music or dance that is followed by two or more variations of the original theme.

Time: The system for measuring change in sight, sound, and movement.

Transition: Separation of one movement from another, or from one dance phrase from another, and at the same time acts as a connecting link between the two respective parts.

Triple Meter: One strong beat followed by two weak beats.

Unoccupied Space: The area within a given shape or space that is not occupied; empty space.

Upstage: The area to the rear of the stage.

Vibratory Movement: Shaking, tremulous type of movement.

Visual Design: A perceived pattern or form.

FOREIGN LANGUAGES

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INTRODUCTION

Foreign-language education has changed dramatically since the last curriculum guidelines were issued by the then Indiana Department of Public Instruction in 1963. Those guidelines were, by and large, lists of phonological, lexical, and structural items to be mastered at each level of instruction. Today's emphasis, however, is upon the development of student skills or proficiency integrated with cultural learnings.

The foreign-language proficiency statements and the proficiency indicators outlined in this guide subsume linguistic learning; that is, the phonology, lexicon, and structures are not expressed explicitly, but are learnings which should be determined by the classroom teachers as necessary for the achievement of proficiencies described in this guide. Learning outcomes which would aid in the achievement of these proficiencies are detailed in a separate document entitled, A Guide to Proficiency-Based Instruction in Modern Foreign Languages for Indiana Schools (Indiana Department of Education, 1986). This document can be obtained by contacting the department.

The proficiency statements as described in this guide and the learning outcomes in the publication referred to above are designed to serve a variety of functions in foreign-language education in Indiana, including:

1. providing a model for the integration of communicative, cultural, and linguistic learning in foreign-language curricula and instruction;
2. helping teachers to move toward the designing of proficiency-based curricula and instruction;
3. assisting teachers in their efforts to improve instruction and evaluation, especially in dealing with the listening and speaking skills;
4. serving as guidelines for the development of specific-language, proficiency-based curriculum guides in French, German, and Spanish; and
5. offering guidance in the less commonly taught languages, e.g., Arabic, Chinese, Japanese, Russian, Swahili, as they emerge in Indiana schools.

On the national level, the issue of proficiency-based instruction is being addressed by the American Council on the Teaching of Foreign Languages (ACTFL) through its development of proficiency guidelines. The ACTFL guidelines, however, fail to address instructional levels in defining learning outcomes. In this guide and in the publication containing the learning outcomes, the Indiana Task Force has made an effort to define proficiency at each level of instruction; a level being defined as one year of instruction in grades 9-12, two years in middle or junior high school, and three years in the intermediate grades (4-6).

It should also be pointed out that proficiency-based instruction has been a recurring theme in many of the national assessments that have appeared over the past several years. The Task Force of the Twentieth Century Fund points out, for example, that "every American public school student should have the opportunity to achieve proficiency in a second language." The concept of proficiency means more than the ability to master isolated vocabulary and certain grammatical and structural concepts. Proficiency means being able to interact productively in the foreign culture through the spontaneous use of the foreign language.

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STATEMENT OF PHILOSOPHY

Foreign-language education provides the opportunity for young people to become culturally sensitive and communicatively competent travelers, students, and/or workers in other societies and cultures in the world, to interact positively and more effectively with native speakers they meet and work with in this country, and to evolve more of those capabilities needed for productive citizenship in Indiana, the United States, and the world.

USE OF THE GUIDE

The foreign-language component of the Indiana Curriculum Proficiency Guide should be used in conjunction with the publication, A Guide to Proficiency-Based Instruction in Modern Foreign Languages for Indiana Schools published by the Indiana Department of Education, 1986 (Hereafter referred to as The F.L. Proficiency Guide). The proficiency statements and the proficiency indicators as outlined here can serve as a means for developing objectives for a school or corporation-wide foreign language program. They may serve as a basis for review and revising current corporation curriculum guides and documents. The F.L. Proficiency Guide outlines the learning outcomes which will enable students to achieve the proficiencies defined here. Once a school corporation has developed objectives for its foreign language program by using the proficiency statements in this guide as a bench mark, the learning outcomes outlined in The F.L. Proficiency Guide can be used by the teachers to determine specific instructional objectives for their foreign language classroom.

In using The F.L. Proficiency Guide, the following steps should be observed:

Step 1: Becoming Familiar with the Rationale for the Guide

The first step is to become familiar with the purpose for and the organization of the guide. Particular attention should be paid to the Introduction and the section on Evaluating Communicative Competencies noting that the emphasis is upon the teaching and evaluation of all skills, emphasizing the listening and speaking skills in cultural contexts.

Step 2: Becoming Familiar with the Content of the Guide

The second step is to study the learning outcomes for the levels that are being taught. In dealing with the learning outcomes themselves, the following should be noted:

- the proficiency statements and the proficiency indicators that introduce the learning outcomes for a given level represent the students' global competence or proficiency at the conclusion of that level;
- only a few of the learning outcomes will call for any changes in teaching techniques and/or evaluation procedures; and
- as much aid as is possible is being offered to local schools, including the option of defining equivalent learning outcomes in order to achieve the best "fit" possible with the school's curriculum and teaching materials.

Step 3: Identifying those Learning Outcomes with "Fit"

As the learning outcomes are reviewed, it will become obvious that some will automatically have "fit" with the local instructional objectives, teaching practices, and evaluation procedures. The third step is to begin using those learning outcomes with "fit" as they become appropriate. Some "weight" should be given to those outcomes involving the oral skills. It should be kept in mind that as work begins with the learning outcomes in the foreign language program that the intent of a proficiency-based curriculum is not to spend the last segment of a semester or a school year in testing; rather, the outcomes defined for a level should be tested as they become appropriate throughout the school year.

Step 4: Defining Equivalent Learning Outcomes

As confidence is gained in using the learning outcomes in evaluating student progress, it will become evident that certain areas have been omitted, for no guide of this kind can "fit" the wide range of local needs and of textbooks that have been adopted in Indiana schools. It is at this stage that equivalent learning outcomes will need to be defined to meet the needs of the curriculum in the particular school and school corporation. As this process is initiated and as it progresses, the emphasis should be kept on the global and oral skills. The proficiency indicators at each level will help in developing equivalent learning outcomes for that level.

Step 5: Defining the Learning Outcomes for Each Level of Instruction for the Local School

After several years, enough experience and confidence should be gained in implementing proficiency-oriented instruction to begin defining those learning outcomes which constitute the proficiency to be attained in each of the levels taught in the school's or corporation's modern foreign language sequence. The process will involve both selecting learning outcomes from the guide (or the specific-language guides as they become available) and defining equivalent outcomes as they are required. This is the final step: defining the outcomes for each of the levels taught in a given school or corporation in each of the languages offered. These learning outcomes, then, should also serve as the major criteria for the selection of teaching materials in the 1990 state textbook adoption.

As local work is begun in defining the learning outcomes for the school or corporation, the following should be taken into consideration:

1. Even though each foreign language teacher is using the same guide, i.e., The F.L. Proficiency Guide, the learning outcomes for French, German, Spanish, etc. will not necessarily be the same.
2. Teachers working alone or as members of a teacher team will have to "adjust" the learning outcomes to fit varied teaching patterns, i.e., multilevel classes, utilizing the same textbook or set of teaching materials for three semesters, etc.
3. It may be necessary to study the learning outcomes in two levels of the guide to find those with the best "fit" in a particular situation, using Level I and Level II outcomes in the guide, for example, to find the best modes for the first level as it is implemented in the school or corporation.
4. The definition of outcomes is an ongoing process, for as teachers increase their skills and find better teaching materials, the evaluation procedures must also be adapted - probably at three-year intervals.

EVALUATION

A major element of any curriculum guide in which the attempt is made to define the proficiency to be achieved at various levels of instruction should be an evaluation and testing component, a component that can be utilized in assessing the achievement of learning outcomes leading toward a specific level of proficiency. Pencil-and-paper, fill-in-the-blank tests are not capable of measuring global communicative skill, i.e., communicative competence, in reading, writing, listening, and especially speaking.

The measurement of the students' ability to achieve the proficiency levels as outlined in this guide and in The F.L. Proficiency Guide, especially those that involve oral communication, can be accomplished in several ways, through:

1. direct oral interview testing procedures;
2. simulation or role playing of real communicative situations; and
3. listening comprehension tests based on real communicative contexts.

The administration of speaking tests will usually require a one-to-one or a teacher with a small group situation and the use of some type of rating scale. If teachers do not have access to such rating scales in their textbook series, the following are suggested for use in scoring both oral and written communicative competencies (learning outcomes).

COMPREHENSIBILITY SCALE

General Definition: Comprehensibility refers to the ability of students to convey meaning and to make themselves understood.

Scale Level Definitions:	Points
Comprehended some phrases or word clusters.	1
Comprehended short simple sentences.	3
Comprehended all of what student said or wrote.	5

AMOUNT OF RELEVANT INFORMATION SCALE

General Definition: Amount of communication refers to the quantity of information relevant to the communicative situation students are able to convey.

Scale Level Definitions:	Points
Very little relevant information was conveyed by the student.	1
A fair amount of relevant information was conveyed by the student.	3
Most or all relevant information was conveyed by the student.	5

STRUCTURAL ACCURACY OF COMMUNICATION SCALE

General Definition: Structural accuracy of communication refers to the linguistic (grammatical correctness of students' statements.

Scale Level Definitions:	Points
Very few statements were structurally correct.	1
Many statements were structurally correct.	3
Most or all statements were structurally correct.	5

LEVEL OF PERFORMANCE SCALE

General Definition: The purpose of this scale is to evaluate whether or not students are performing at the level of the class in which they are enrolled. **This scale should only be used at the higher levels of instruction - Level III and above.**

Although students may perform well on the three previous scales, their performances may still reflect very simple language in terms of structure and syntax, and thus they do not meet the criteria for a Level III or above class. This is a scale for Level III students.

Scale Level Definitions:	Points
The communication is more appropriate to Level I with minimal responses, the use of simple sentences, and frequent requests for slowed speech or repetition of the question(s).	1
The communication is more appropriate to Level II, for although students converse somewhat more extensively than rank beginners, they do not provide details or use compound or complex sentences.	3
The communication is appropriate to Level III in the amount of communication, the use of compound and/or complex sentences, and the more detailed information.	5

In adjusting the scale for use with Level IV students, the teacher might use the Levels II and III definitions above, adding:

The communication is appropriate to Level IV, for students are interesting communicators, providing details, solving problems, improvising as necessary, and persuading or arguing as necessary.

It should be noted that the kinds of scales described above are not necessarily applicable or usable with every learning outcome in The F.L. Proficiency Guide. Those learning outcomes involving the receptive skills - listening comprehension and reading - may best be evaluated by testing instruments and procedures already being utilized by teachers or those published to accompany textbooks.

Teachers who utilize these evaluation procedures must keep in mind that they are evaluating achievement of specific learning outcomes and not proficiency. Proficiency evaluation is accomplished through such procedures as the ACTFL/ETS Oral Interview. Proficiency assessment such as the ACTFL/ETS procedure are used at the end of a foreign language experience for such purposes as placement, employer information, scholarship application, or perhaps at intervals in a program to assess it in place of a written standardized test.

(All the scales except the Level of Performance Scale were adapted by the Task Force from evaluation scales developed by Renate A. Schulz and Walter H. Bartz cited in Cathy Linder, editor, Oral Communication Testing: A Handbook for the Foreign Language Teacher. Skokie, IL: National Textbook Company, 1977, pages 6-7.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency,** as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling. In foreign language, these statements are listed by levels - I, II, III, and IV.

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C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in foreign language. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit: Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.

3rd Digit: "Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.

4th Digit: Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.

5th & 6th Digit: Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **modern foreign languages** proficiencies:

Foundation Proficiency Statements	040000
Specific Proficiency Statements	
Level I	040001
Level II	040002
Level III	040003
Level IV	040004

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS - MODERN FOREIGN LANGUAGES

List 040000

Students in Indiana schools will be provided learning experiences in **modern foreign languages** which allow them to:

1. acquire the skills needed to communicate in languages other than their native one.

2. acquire an understanding and appreciation of others and of themselves by comparing their own culture with the cultures, social behaviors, and values of people from various areas of the world.

3. acquire knowledge about the politics, history, geography, literature, and the arts of other societies in the world.

MODERN FOREIGN LANGUAGES
LEVEL I

Instruction at this level introduces students to the pronunciation and intonation patterns, the basic grammatical structures and vocabulary of the language in beginning to develop elementary listening, speaking, reading, and writing skills. While the early stages of Level I are devoted to "skill-getting" activities, i.e., phonetic and grammatical drills and exercises, there should be increased "skill-using" activities to develop the students' communication skills including:

1. listening comprehension exercises of increasing difficulty;
2. guided and structured oral communication tasks in phonetically acceptable language;
3. reading graded and glossed materials; and
4. writing correctly the language which can be produced orally.

Cultural learning, presenting the "life-way" of the society, should be an integral part of all language learnings.

Proficiency List 040001

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in Level I of a **modern foreign language**, students should	Students will
1. **participate in brief conversations over familiar topics with some concentration on meeting very basic travel and personal needs, using simple sentences, and asking for slowed speech or repetition when necessary.**	a. identify and pronounce names of countries and cities.
	b. describe geographic points with respect to one another.
	c. describe likes and dislikes regarding sports, music, television, etc.
	d. describe family relationships.
	e. make introductions.
	f. describe their homes.
	g. describe daily activities.
	h. describe school and school activities.
	i. describe modes of transportation.
	j. make appropriate greetings.
	k. buy a product.
	l. use the telephone for specific needs.
	m. make requests.
	n. describe states of being.
	o. express feelings.

Specific Proficiency Statements	**Sample Indicators**
2. comprehend the spoken language in the form of directions, commands, questions, structured conversations, and simple narrative descriptions.	a. respond to commands dealing with classroom activities. b. comprehend and follow directions. c. comprehend information dealing with hotels. d. read a menu and comprehend information regarding the ordering of meals. e. comprehend weather facts and weather predictions. f. respond to requests.
3. read graded narrative and cultural materials over familiar topics.	a. read, identify, and describe favorite television programming. b. read and write letters describing involvement in sports or other leisure activities. c. read a menu and comprehend information regarding the ordering of meals. d. identify appropriate markets (stores) for shopping.
4. write any language that can be produced orally.	a. identify and write names of geographic points. b. read and write letters describing involvement in sports or other leisure activities. c. describe their homes. d. describe a meal. e. describe daily activities. f. describe modes of transportation. g. identify appropriate markets (stores) for shopping.
5. understand the appropriate behavior and etiquette in a limited number of social situations.	a. make introductions. b. make appropriate greetings. c. read a menu and comprehend information regarding the ordering of meals. d. buy a product. e. use the telephone on a limited basis. f. make requests. g. respond to requests. h. express feelings.
6. demonstrate increasing awareness of other world areas and views.	a. identify and pronounce names of countries and views. b. identify and write names of geographic points. c. describe geographic points with respect to one another. d. read, identify, and describe favorite television programming. e. describe family relationships. f. describe modes of transportation. g. comprehend weather facts and weather predictions.

MODERN FOREIGN LANGUAGES
LEVEL II

Instruction at this level opens with a systematic review of the Level I work. While the emphases in Level I are on phonology, basic grammar, and the listening and speaking skills, Level II concentrates on the mastery of syntax, the expansion of vocabulary, and the reading and writing skills. Instruction should provide for the students' increased ability to:

1. listen to and acquire information;
2. express themselves more freely and with greater linguistic sophistication in discussions, simulations, role playing situations, and conversations;
3. read, comprehend, and discuss edited expository materials; and
4. write synopses, short compositions, and letters with accuracy and appropriate idiomatic expression.

The cultural studies integrated with the language studies at this level are focused on more "life-way" study for the most part.

Proficiency List 040002

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in Level II of a **modern foreign language**, students should	Students will
1. **converse somewhat more extensively - requesting information or assistance, describing events in their lives or that they have studied, initiating some discussions, performing social functions, and meeting routine travel and personal needs.**	a. explain and identify professions, products, and places of work. b. identify and describe cities and countries visited on a simulated trip around the world. c. describe the foreign culture(s) in terms of geography, sports, products, etc. d. respond to oral commands dealing with meals. e. describe to a foreign student a typical American home. f. describe a party. g. read menus and make meal selections. h. order a meal with monetary restrictions. i. describe a picnic lunch. j. give directions based on a map. k. plan and describe a tour in the foreign country. l. read a hotel guide and choose a hotel. m. resolve a problem/conflict in the process of checking into a hotel. n. express appropriate requests in a post office. o. buy a necessary product to resolve a predicament. p. initiate a conversation. q. respond appropriately to a social situation which requires a verbal interaction.

Specific Proficiency Statements	**Sample Indicators**
	r. give directions dealing with classroom activities. s. explain someone's needs to a third party. t. express needs and desires dealing with shopping.
2. comprehend the spoken language well enough to acquire and organize structured information.	a. respond to oral commands dealing with meals. b. initiate a conversation. c. respond appropriately to a social situation which requires a verbal interaction. d. respond to and give directions dealing with classroom activities.
3. read for information especially on cultural topics.	a. read menus and make meal selections. b. order a meal with monetary restrictions. c. read a train or bus schedule. d. read a hotel guide and choose a hotel. e. list appropriate clothes to wear, based on weather reports.
4. write short compositions on familiar topics, structured letters, outlines and synopses, and fill out some of the forms encountered in the culture.	a. describe the school day. b. write a letter describing a day in the foreign culture. c. write a description of a special event in the foreign culture. d. identify specific places in the foreign culture(s) to be visited in order to experience a variety of opportunities. e. describe famous people of the foreign culture. f. write a letter describing meals in the foreign culture. g. plan and describe a day's activities for a foreign visitor. h. write a letter describing their families. i. list appropriate clothes to wear, based on weather reports. j. write appropriate salutations, closing, etc. for a friendly letter. k. write a business letter.
5. demonstrate a broader knowledge of social behavior and values in the "motherland."	a. explain and identify professions, products, and places of work. b. write a letter describing a day in the foreign culture. c. write a description of a special event in the foreign culture.

Specific Proficiency Statements

Sample Indicators

d. identify specific places in the foreign culture(s) to be visited in order to experience a variety of opportunities.
e. describe famous people of the foreign culture.
f. describe the foreign culture(s) in terms of geography, sports, products, etc.
g. respond to oral commands dealing with meals.
h. write a letter describing meals in the foreign culture.
i. describe a party.
j. read menus and make meal selections.
k. describe a picnic lunch.
l. read a hotel guide and choose a hotel.
m. resolve a problem/conflict in the process of checking into a hotel.
n. list appropriate clothes to wear, based on weather reports.
o. write appropriate salutations, closings, etc. for a friendly letter.
p. write a business letter.
q. express appropriate requests in a post office.
r. buy a necessary product to resolve a predicament.
s. initiate a conversation.
t. respond appropriately to a social situation which requires a verbal interaction.
u. express needs and desires dealing with shopping.

MODERN FOREIGN LANGUAGES
LEVEL III

Instruction at this level is designed to provide the student with greater facility in all the language skills. In speaking and writing, the student should be given the opportunity to express original ideas, expanding his or her vocabulary through individual interests, as well as through basal materials. The reading materials should consist of expository prose, including cultural studies aimed at providing an understanding of the major developmental trends in such areas as history, literature, art, music, and the modern societies of the countries speaking the language. At Level III it is anticipated that the class will be conducted wholly in the language.

Proficiency List 040003

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in Level III of a **modern foreign language**, students should	Students will
1. **speak on a variety of topics, handling a wide range of social transactions and providing more detailed information and fuller descriptions in a discourse that is better developed as to the amount of communication, the use of both compound and complex sentences, the sequencing of time expressions, and the utilization of questions for clarification.**	a. describe the foreign country to a potential visitor/tourist. b. research and report on the influences of speakers of the foreign language on the United States. c. report on the times and life of an historical figure of the foreign culture. d. make special requests of a sales clerk. e. compare meals (eating habits) in the foreign culture with those of the United States. f. compare forms of entertainment in the foreign culture with those in the United States. g. inquire about accommodations at a hotel. h. respond to a situation in which restaurant service is unsatisfactory. i. identify and describe famous places in a specific city. j. research and report on an artist of the foreign culture. k. identify and describe works in famous museums of the foreign culture(s). l. dramatize scenes from literature. m. read a short story or poem and give personal reactions. n. role play characters in short fiction, folklore, novels, or poetry.

Specific Proficiency Statements	Sample Indicators
2. comprehend the spoken language well enough to acquire information with retention that permits further use of that information.	a. describe the foreign country to a potential visitor/ tourist. b. make special requests of a sale clerk. c. inquire about accommodations at a hotel. d. listen to a folktale, fairy tale, passage from a literary work, etc. and write a summary.
3. read with understanding a variety of written styles - expository, prose, poetry, short stories, short novels, history, and popular print media.	a. respond to a job advertisement. b. describe the foreign country to a potential visitor/ tourist. c. research and report on the influences of speakers of the foreign language on the United States. d. arrange chronologically major historical events of the foreign culture. e. report on the times and life of an historical figure of the foreign culture. f. contrast the government of the foreign culture(s) with the government of the United States. g. research and report on shopping habits in the foreign culture. h. describe table etiquette and table settings of the foreign culture. i. compare and contrast television in the foreign culture with that of the United States. j. compare and contrast foreign newspapers with those of the United States. k. respond to a situation in which restaurant service is unsatisfactory. l. identify and describe famous places in a specific city. m. research and report on an artist of the foreign culture. n. identify and describe works in famous museums of the foreign culture(s). o. read a short story and write a summary retelling the story from a different point of view. p. dramatize scenes from literature. q. read a short story or poem and give personal reactions. r. role play characters in short fiction, folklore, novels, or poetry.

Specific Proficiency Statements	Sample Indicators
4. write summaries, descriptive narratives, formal and informal letters, and compositions on the learnings acquired through listening and reading.	a. respond to a job advertisement. b. arrange chronologically major historical events of the foreign culture. c. write a business letter ordering a product. d. research and report on shopping habits in the foreign culture. e. describe table etiquette and table settings of the foreign culture. f. describe a home in the foreign culture. g. write a thank-you letter to the host of a party. h. compare and contrast television in the foreign culture with that of the United States. i. compare and contrast foreign newspapers with those of the United States. j. identify and describe famous places in a specific city. k. give personal reactions to a work of a major artist. l. read a short story and write a summary retelling the story from a different point of view. m. listen to a folktale, fairy tale, passage from a literary work, etc. and write a summary. n. read a short story or poem and give personal reactions.
5. demonstrate an understanding of the major historical and/or literary trends, value systems, political structures, and cultural contributions of the societies speaking the language.	a. respond to a job advertisement. b. describe the foreign country to a potential visitor/ tourist. c. research and report on the influences of speakers of the foreign language on the United States. d. arrange chronologically major historical events of the foreign culture. e. report on the times and life of an historical figure of the United States. f. contrast the government of the foreign culture(s) with the government of the United States. g. make special requests of a sales clerk. h. write a business letter ordering a product. i. research and report on shopping habits in the foreign culture. j. describe table etiquette and table settings of the foreign culture. k. compare meals (eating habits) in the foreign culture with those of the United States. l. describe a home in the foreign culture. m. write a thank-you letter to the host of a party. n. compare and contrast television in the foreign culture with that of the United States.

Specific Proficiency Statements **Sample Indicators**

o. compare and contrast foreign newspapers with those of the United States.

p. compare forms of entertainment in the foreign culture with those in the United States.

q. inquire about accommodations at a hotel.

r. respond to a situation in which restaurant service is unsatisfactory.

s. identify and describe famous places in a specific city.

t. research and report on an artist of the foreign culture.

u. give personal reactions to a work of a major artist.

v. identify and describe works in famous museums of the foreign culture(s).

w. read a short story and write a summary retelling the story from a different point of view.

x. dramatize scenes from literature.

y. listen to a folktale, fairy tale, passage from a literary work, etc. and write a summary.

z. read a short story or poem and give personal reactions.

aa. role play characters in short fiction, folklore, novels or poetry.

MODERN FOREIGN LANGUAGES
LEVEL IV

Instruction at this level has two basic aims:

1. providing the student with a broad survey of the literature of the country or countries speaking the language through selected readings from major authors; and/or
2. giving the student opportunities to study a variety of contemporary topics in newspapers, magazines, and current publications.

Students should be given varied experiences in refining their communication skills via listening, speaking, reading and writing activities. Advanced Placement courses should also be considered at this level.

Proficiency List 040004

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in Level IV of a **modern foreign language**, students should	Students will
1. **speak the language as an interesting communicator, capable of interacting as an almost full partner in a casual conversation and of dealing with detailed discussions and solving problems, improvising as necessary.**	a. describe historical events that have occurred in a specific city or region. b. describe a fantasy trip around the world. c. research and describe a famous historical figure. d. summarize or discuss a point of interest of a film, videotape, recording, or a radio broadcast. e. research and report on an author, painter, musician, architect, etc. f. dramatize an episode from a short story, novel or drama. g. listen to a story or fable and create a fable or fairy tale which teaches a moral.
2. **comprehend the spoken language well enough to enjoy films, radio programs, lectures, etc.**	a. comprehend and identify regional variants of the foreign language. b. outline, summarize, and critique a film or videotape. c. summarize or discuss a point of interest of a film, videotape, recording, or a radio broadcast. d. listen to a story or fable and create a fable or fairy tale which teaches a moral.

Specific Proficiency Statements	Sample Indicators
3. read a variety of written styles with understanding, acquire and use new vocabulary on their own, and use the language as a vehicle for research and study.	a. describe historical events that have occurred in a specific city or region. b. research and report on a period of history in the foreign culture. c. based on popular print media, research and contrast various points of contemporary life in the foreign culture(s). d. research and describe a famous historical figure. e. research and report on an author, painter, musician, architect, etc. f. dramatize an episode from a short story, novel, or drama. g. read a selected piece of literature and write a paper discussing the author's attitude toward a specific theme. h. read a selected piece of literature and, based on the piece, write a one-act play or rewrite the ending.
4. write a variety of narrative and contrastive essays, take notes, and write more extensive compositions.	a. comprehend and identify regional variants of the foreign language. b. research and report on a period of history in the foreign culture. c. based on popular print media, research and contrast various points of view of contemporary life in the foreign culture. d. outline, summarize, and critique a film or videotape. e. read a selected piece of literature and write a paper discussing the author's attitude toward a specific theme. f. read a selected piece of literature and, based on the piece, write a one-act play or rewrite the ending.
5. demonstrate in-depth understandings of geography, history, institutions, art, literature, music, political systems, and customs of the areas where the language is spoken.	a. comprehend and identify regional variants of the foreign language. b. describe historical events that have occurred in a specific city or region. c. research and report on a period of history in the foreign culture. d. based on popular print media, research and contrast various points of view of contemporary life in the foreign culture. e. research and describe a famous historical figure. f. outline, summarize, and critique a film or videotape.

Specific Proficiency Statements	**Sample Indicators**
	g. summarize or discuss a point of interest of a film, videotape, recording, or a radio broadcast.
	h. research and report on an author, painter, musician, architect, etc.
	i. dramatize an episode from a short story, novel, or drama.
	j. read a selected piece of literature and write a paper discussing the author's attitude toward a specific theme.
	k. read a selected piece of literature and, based on the piece, write a one-act play or rewrite the ending.
	l. listen to a story or fable and create a fable or fairy tale which teaches a moral.

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HEALTH EDUCATION

&

PHYSICAL EDUCATION

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INTRODUCTION

The Health Education Proficiency Guide presents a K-12 conceptual framework for a K-12 health education program. The guide structures the curriculum around ten content areas identified by a national school health education task force and reported in Recommendations for School Health Education: A Handbook for State Policymakers as basic to a comprehensive health education program. This same task force stated the following in discussing the importance of school health education:

> "Health education is a means of enabling people to assume a greater role in their own health care. Health education in the schools, kindergarten through 12th grade, can help children develop a positive attitude about health, can provide them with information on ways to take care of their health, and can help them acquire skills to make health-related decisions now and in the future."

Recommendations for School Health Education: A Handbook for State Policymakers
Education Commission of the States, March 1981

The Health Education Proficiency Guide is not intended to take the place of locally developed curriculum plans for health education. However, it is hoped that local curriculum planners in health education will find the guide to be a useful document for their curriculum development efforts.

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STATEMENT OF PHILOSOPHY

A well-designed and implemented health education program can prevent health problems and improve the quality of life and total well-being. Comprehensive health education develops skills for daily living and prepares individuals for their future. Efforts must be made to emphasize health as a value in life and to enhance critical thinking, decision making, problem solving, and behavioral skills. Quality health education motivates individuals to voluntarily take an active role in protecting, maintaining, and improving their health.

SCHOOL HEALTH EDUCATION - CONTENT AREAS

A comprehensive school health instructional program is defined by the following:

A. Instruction intended to motivate health maintenance and promote wellness and not merely the prevention of disease or disability.

B. Activities designed to develop decision-making competencies related to health and health behavior.

C. A planned, sequential K-12 curriculum based upon students' needs and current and emerging health concepts and societal issues.

D. Opportunities for all students to develop and demonstrate health-related knowledge, attitudes, and practices.

E. Acceptance that human health is multidimensional - physical, spiritual, mental, emotional, and social. A health education program addresses the content areas within these dimensions.

The following content areas are to be included in a comprehensive health education program:

1. Growth and Development
2. Mental and Emotional Health
3. Community Health/Environmental Health
4. Nutrition
5. Family Life Education
6. Consumer Health
7. Personal Health
8. Chemical Substance Use and Abuse
9. Accident Prevention and Safety
10. Health Promotion/Disease Prevention

1. Growth and Development

Growth and development is the study of the structure and function of the human body systems, their interdependence and how they function as a whole, and growth and development patterns from birth to death.

Topics may include: health needs of specific age groups including prenatal growth and development; influence of heredity and environment; body systems; interdependence of physical, emotional, intellectual, and social growth; development and well-being.

2. Mental and Emotional Health

Mental and emotional health is the ability to use appropriate coping skills, to express emotions in a way which demonstrates respect for self and others, and the inherent value of tne individual.

Topics may include: positive self-concept; personality; emotional stability; responsibility; motivation; independence; mental disorders; coping with stress; mental health services; communication skills; goal-setting; interpersonal relationships; prevention of abusive behaviors; decision making; suicide prevention; and respect for the rights and property of others.

3. Community Health/Environmental Health

Community health is the way individuals employ community resources to assist them in the protection, maintenance, and promotion of personal and environmental health.

Topics may include: individual and group responsibility; waste disposal; environmental pollution; health resources and facilities; official and voluntary health agencies; environmental protection agencies; health careers; population density; natural disasters; safety hazards; health planning; world health; and investigation of the causes and effects and methods of eradication of all negative environmental factors.

4. Nutrition

Nutrition is the science of how food is used by the body. Good food consumption habits which build and protect health can be learned but are influenced by family, peers, culture, media, etc.

Topics may include: food choices and factors influencing choices; individual nutritional requirements; food groups and nutrients; food sources; weight control; effects of nutrition on growth and development; food preparation and protection; hunger, consumer protection; food additives and eating disorders.

5. Family Life

The family is the major contributing factor to the development of the child. Each member of the family has roles and responsibilities. Changes in the responsibilities and privileges each person encounters during the life cycle are studied in addition to the multitude of factors which influence the expression of human sexuality. Societal problems and challenges of personal adjustment, preparation for marriage, and family living are explored to enhance the family as the foundation of society.

Topics may include: family composition and roles; life cycles; the reproductive process; heredity; marriage; selecting a compatible life partner; family relationships; parenting.

6. Consumer Health

Personal health is the responsibility of each individual. Factors which influence the selection and use of information, health services, and products should be conducive to good health.

Topics may include: individual responsibility; advertising; social and economic factors; consumer protection laws; regulations and agencies; health agencies and organizations; health insurance; medical services; quackery; reliable sources of health information; evaluating health products and services; and use of health care professionals.

7. Personal Health

Factors affecting a person's health and well-being are environment, heredity, and personal life style. Using problem-solving and decision-making skills, individuals can assess their life styles and assume responsibility for personal health choices.

Topics may include: sleep; rest; relaxation; posture; oral health; vision and hearing; personal hygiene; recreation, physical fitness, and lifetime physical activities; the concept of wellness; aging; death and dying.

8. Chemical Substance Use and Abuse

Chemical substances include any substance other than food taken into the body which alters structure and/or function. These include alcohol, tobacco, caffeine, prescription and over-the-counter drugs and those illegally available.

Topics may include: personal goals; individual responsibility; peer pressure; alternatives to substance use; self-concept; classification of substances and their effects on the body; implications of use of substances; how habits are formed and influence health; respect for self and others; prevention; intervention; treatment and rehabilitation programs; laws and regulations for use and misuse of substances.

9. Accident Prevention and Safety

Accidents are the leading cause of death among young people ages one to twenty-four. The exploration of human and environmental influences can be employed to reduce or eliminate hazardous conditions. Knowledge of accident prevention and causation, first aid, CPR, and emergency care can help students to safely live, work, and play in society.

Topics may include: attitudes about safety; causes of accidents; home and school safety; vehicle safety; bicycle safety; school bus safety; environmental hazards; accident prevention; first aid; emergency and CPR care; water-related hazards; resources and agencies; individual safety precautions; recreational safety; safety rules; laws/regulations; risk-taking behaviors; occupational safety; emergency personnel; prevention of abuse and family violence.

10. Health Promotion/Disease Prevention

Health promotion facilitates individual life style choices and other health-related behaviors to improve future well-being. Disease prevention is an investigation of the factors contributing to the incidence of major chronic and communicable diseases and disorders.

Topics may include: causes of diseases; preventive measures; morbidity and mortality; immunizations; personal and community health efforts; comparison of wellness and illness; sexually-transmitted diseases; and health-enhancing habits.

CURRICULUM PLANNING

A curriculum development model outlining the steps involved in the process of development, review, and revision of curriculum is provided in the Indiana Curriculum Proficiency Guide. Curriculum designers may find the model helpful as they undertake curriculum development work in the area of health education.

Establish a Vision

A philosophy (or vision) of health education that is consistent with the general education goals of the school corporation should be developed by the local curriculum planning team. When the philosophy is established, the team can assess the needs of the current physical education program and set the goals that reflect the philosophy.

Assessing Needs

A survey of teachers, students, and recent graduates can give data that will help evaluate the present program. The following questions should be asked:

a) How well does the present program meet the needs of students?
b) What are some areas of strength and weakness?
c) Is the program consistent with recommendations of professional organizations and with recent research on teaching/learning strategies?

After the areas of need have been identified, ways to deal effectively with those needs can be established. These areas may involve content, or they may reflect organizational or instructional problems.

Setting Goals

A set of goals and objectives for health education should be established and approved. An understanding of these goals and objectives by all members of the curriculum planning committee will give direction to the classroom teacher. In developing the goals and objectives for the health education program, the committee should consult the state health education proficiency statements, the recommendations of professional organizations, and the recent research in the field.

Implementation and Evaluation

Once the goals for the health education program have been established, the implementation process begins. All involved in presenting appropriate learning experiences to students should have input regarding time lines, instructional methods, and materials to be used. The program should be continually evaluated to ensure that the needs of all students are being met.

General Suggestions

- Involve as many persons as possible in the process.
- Maintain K-12 continuity by encouraging overlapping committees or by holding joint meetings.
- Be aware of the recommendations of governmental health agencies and professional organizations, such as the American School Health Association and the American Alliance for Health, Physical Education, Recreation, and Dance.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency**, as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling.

C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in health education. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit: Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.

3rd Digit: "Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.

4th Digit: Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.

5th & 6th Digit: Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **health education** proficiencies:

Foundation Proficiency Statements	070100
Specific Proficiency Statements	
Kindergarten/Primary	071100
Upper Elementary	072100
Middle/Junior High School	073100
High School	074100

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS - HEALTH EDUCATION

Students in Indiana schools will be provided learning experiences in **health education** which allow them to:

1. use data gathering and organization skills to identify and investigate questions and assumptions about health.
2. apply communication skills to acquire and exchange knowledge about health.
3. use the major concepts and knowledge in health science in critical thinking.
4. evaluate applications of scientific discoveries in health in terms of their overall effects.
5. demonstrate competence and confidence in utilizing health knowledge, processes, and attitudes in making informed decisions.
6. recognize the concept that health is a right and responsibility of every individual and community.
7. internalize the concept that health is multidimensional - mental, physical, social, emotional, and spiritual - and has an impact on the quality of life.

HEALTH EDUCATION
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 071100

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **health education** at kindergarten through grade three, students should	Students will
Growth and Development	
1. understand that growth and development is multidimensional, follows a predictable sequence, and yet is individually unique.	a. name major body parts and organs and their related functions. b. explain why children of the same age may differ in their rate and stage of growth and development and why these differences are to be expected. c. explain life-style behaviors affecting growth and development.
Mental and Emotional Health	
2. assess and internalize the impact of emotions and stress on self-concept, behavior, and relationships with others.	a. cite examples of how people are alike and different. b. explain how the expression of emotions can help or hurt oneself and others. c. demonstrate respect for self and the rights of others.
Community Health/Environmental Health	
3. understand that health promotion/disease prevention is an individual, community, national, and international concern and responsibility.	a. define **health** and **community**. b. identify health problems and solutions which are the responsibility of individuals and groups. c. discuss individual and group efforts designed to solve community health needs. d. demonstrate an awareness of roles of health professionals.

Specific Proficiency Statements	Sample Indicators
Nutrition	
4. determine how nutritional intake and eating patterns affect and are affected by physical, social, mental, economic, and cultural factors.	a. identify the basic food groups. b. identify nutritious foods. c. identify the tastes of a variety of foods.
Family Life	
5. understand the interaction between the family and one's interpersonal relationships.	a. explain that families in present-day society may have different structures. b. discuss similarities and differences among individuals in interests and activities. c. discover that all living things come from other living things.
Consumer Health	
6. compare and contrast the factors that influence the individual's responsible selection, utilization, and evaluation of health information, products, and services.	a. state the steps of making an informed decision. b. state the importance of being an informed health consumer. c. identify people who are qualified to protect, promote, and safeguard their health and well-being. d. explain why laws and regulations exist to protect the consumer. e. give examples of exaggerated advertising.
Personal Health	
7. evaluate and integrate the complexity of forces which influence personal health principles and behavior in decision-making for the attainment of high level wellness throughout the life cycle.	a. explain why sleep and rest are necessary for proper growth. b. explain the practices which lead to the maintenance of good dental health. c. demonstrate desirable practices of cleanliness and personal grooming. d. describe why care of eyes and ears is important. e. identify components of fitness/wellness.

Specific Proficiency Statements	Sample Indicators
Chemical Substance Use and Abuse	
8. recognize that the use of chemical substances arises from a variety of motivations, and the effects have an impact on the health of the individual, the family, and the community.	a. identify warning labels found on common products. b. describe different forms of drugs, e.g., prescription, over-the-counter drugs, and illegal drugs. c. identify individuals who are qualified to administer and/or dispense drugs. d. identify chemical substances commonly used that modify mood and behavior such as alcohol, tobacco, caffeine. e. identify differences between alcoholic beverages and other beverages. f. discuss the concept of "JUST SAY NO." g. identify the peer pressure concept.
Accident Prevention and Safety	
9. perceive the potential for hazards and accidents in any environment and the application of preventive and emergency measures.	a. describe the human and environmental factors related to accidents. b. identify safety hazards which exist in the home, school, and community. c. identify steps for preventing accidents. d. demonstrate desired responses to emergency situations when alone or with others. e. identify personal safety risks, precautionary measures, and appropriate responses to abuse, violence, etc.
Health Promotion/Disease Prevention	
10. understand the causal factors of diseases and disorders and the extent to which certain diseases and disorders can be prevented, treated, and controlled through individual health behaviors.	a. list characteristics of illness and wellness. b. identify factors which affect personal well-being. c. discuss ways in which disease-causing organisms can be transmitted. d. identify ways in which people can protect themselves and others from disease.

HEALTH EDUCATION
UPPER ELEMENTARY LEVEL

Proficiency List 072100

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **health education** at the upper elementary levels, students should	Students will
Growth and Development	
1. understand that growth and development is multidimensional, follows a predictable sequence, and yet is individually unique.	a. describe the basic structure and functions of the body systems. b. identify the impact of different life-style behaviors on the processes of growing and developing. c. cite the effects of heredity and environment on growth and development. d. describe how growth and development occurs at different rates for body parts, systems, and functions. e. explain similarities and differences in children's growth and development (within and between gender).
Mental and Emotional Health	
2. assess and internalize the impact of emotions and stress on self-concept, social behavior, and relationships with others.	a. explain how heredity and environment contribute to the formation of personality. b. describe how emotions can be expressed and how they may affect a person physically. c. describe how personal behavior affects self and others. d. demonstrate acceptance of responsibility for personal behavior.
Community Health/Environmental Health	
3. understand that health promotion/disease prevention is an individual, community, national, and international concern and responsibility.	a. explain why health programs are alike and how they may differ from community to community. b. identify agencies which work to improve the health of the community. c. identify careers of health professionals.

Specific Proficiency Statements	Sample Indicators
Nutrition	
4. determine how nutritional intake and eating patterns affect and are affected by physical, social, mental, economic, and cultural factors.	a. describe the basic food groups. b. identify the nutrients important to good health. c. apply nutrition knowledge in making daily food choices. d. explain the link between eating habits and emotions.
Family Life	
5. understand how an individual's relationships influence and are influenced by the family which has evolved as a result of the interaction of social, economic, and cultural factors.	a. describe family roles and responsibilities which contribute to the health of individuals. b. describe personal qualities affecting peer group relationships. c. define heredity and classify inherited and acquired characteristics. d. identify concepts related to sexual growth and development. e. describe effective parenting skills.
Consumer Health	
6. develop the ability to compare and contrast the factors that influence the individual's responsible selection, utilization, and evaluation of health information, products, and services.	a. explain how family habits and values influence selection and use of health information, products, and services. b. identify medical, dental, and health-related specialists and their roles in providing health services. c. evaluate health information, products, and services and seek additional information. d. apply the knowledge that self-diagnosis and treatment, unwise use of medicine, chemical agents, devices, cosmetics, and dietary supplements may be harmful. e. give examples of the influence of advertising on the purchase of health products.

Specific Proficiency Statements	Sample Indicators
Personal Health	
7. evaluate and integrate the complexity of forces which influence personal health principles and behavior in decision-making for the attainment of high level wellness throughout the life cycle.	a. explain why parental guidance is necessary in determining a proper balance for sleep, rest, and activity. b. explain why physical activity is essential for good health. c. explain why good health practices are valuable in maintaining wellness. d. compare immediate and long-range effects of personal health care choices.
Chemical Substance Use and Abuse	
8. recognize that the use of chemical substances arises from a variety of motivations, and the effects have an impact on the health of the individual, the family, and the community.	a. differentiate among constraints on purchase, possession, and use of chemical substances that modify mood and behavior. b. identify reasons why certain individuals might experiment with and possibly become regular users of chemical substances such as caffeine, alcohol, and other drugs. c. discuss levels of chemical substance use and abuse with accompanying health risks. d. discuss alternatives to chemical substance use including the technique of "Saying No." e. identify effects of peer pressure and refusal skills.
Accident Prevention and Safety	
9. perceive the potential for hazards and accidents in any environment and the application of preventive and emergency measures.	a. explain relationships between human behavior and accidents. b. demonstrate basic first aid skills. c. identify resources for help and information in threatening and emergency situations. d. identify existing and potential safety hazards within the home, school, and community.

Specific Proficiency Statements	Sample Indicators
Health Promotion/Disease Prevention	
10. understand the causal factors of disease and disorders and the extent to which certain diseases and disorders can be prevented, treated, and controlled through individual health behaviors.	a. identify causes of disease. b. identify ways diseases can be prevented, controlled, or cured. c. cite examples of the effects of disease upon individuals, groups, and communities. d. discuss how factors, including the desire for fitness/wellness motivates individuals and organizations to promote and maintain health.

HEALTH EDUCATION
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 073100

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **health education** at the middle/junior high school level, students should	Students will
Growth and Development	
1. **understand that growth and development is multidimensional, follows a predictable sequence, and yet is individually unique.**	a. describe the structure and functions of the body systems. b. describe how physical, mental, and social growth and development are interdependent. c. identify the growth and development changes that occur in males and females during adolescence. d. explain ways adolescent physical, mental, and social growth and development create needs and influence behavior. e. suggest reasons why some adolescent health and behavior problems emerge as a result of accelerated/delayed growth. f. describe ways one can promote physical, mental, and social growth and development.
Mental and Emotional Health	
2. **assess and internalize the impact of emotions and stress on self-concept, behavior, and relationships with others.**	a. describe how discovery and acceptance of self is important to health. b. explain why it is important to find time to be alone. c. discuss the importance of sharing feelings. d. describe ways in which feelings affect behavior. e. demonstrate respect for individual differences. f. demonstrate acceptance of responsibility for personal behavior. g. identify causes and effects of stress.

Specific Proficiency Statements	Sample Indicators
Community Health/Environmental Health	
3. understand that health promotion/disease prevention is an individual, community, national, and international concern and responsibility.	a. describe the qualities of a healthy community. b. discuss changes which influence the health of a community. c. describe the forces (e.g., technology, demography, etc.) which initiate and implement changes in community health programs. d. describe how an individual might unite with others to improve the level of health within a community. e. identify health career opportunities.
Nutrition	
4. determine how nutritional intake and eating patterns affect and are affected by physical, social, mental, economic, and cultural factors.	a. explain how food choices are influenced by experiences, concern for growth and development, and social relations. b. describe the relationship between nutritional status and one's state of health. c. apply the principles of nutrition to the selection of food for healthy eating. d. identify eating disorders such as anorexia nervosa and bulemia. e. describe potential dangers involved in the improper preparation and storage of food.
Family Life	
5. understand how an individual's relationships influence and are influenced by the family which has evolved as a result of the interaction of social, economic, and cultural factors.	a. analyze social, economic, cultural, and ethnic influences on family life. b. discuss the nature of sexuality as an aspect of one's total well-being. c. demonstrate knowledge of correct terminology related to sexuality. d. discuss social problems related to sexual relationships. e. explain how changes in growth and development affect dating behavior. f. analyze various parenting styles and skills which influence effective parenting.

Specific Proficiency Statements	Sample Indicators
Consumer Health	
6. develop the ability to compare and contrast the factors that influence the individual's responsible selection, utilization, and evaluation of health information, products, and services.	a. develop guidelines for wise selection and use of health information, products, and services. b. analyze information and claims about products and services presented through the media. c. identify medical, dental, and health-related specialists and their roles in consumer health. d. identify criteria for selection of consumer goods and services.
Personal Health	
7. evaluate and integrate the complexity of forces which influence personal health principles and behavior in decision-making for the attainment of high level wellness throughout the life cycle.	a. explain how and why needs for sleep, rest, and physical activity change during different stages of the life cycle. b. identify the social and environmental influences on personal health practices. c. identify areas where personal health behaviors may need to be changed. d. explain how healthful appearance, emotional security, and social approval develop self-esteem. e. explain the interrelationship of physical, social, and emotional health. f. identify health problems of early adolescence which involve personal decisions.
Chemical Substance Use and Abuse	
8. recognize that the use of chemical substances arises from a variety of motivations, and the effects have an impact on the health of the individual, the family, and the community.	a. identify the customs and rules of family, school, and the community regarding the use of chemical substances. b. explain the interplay of personal, social, family, and environmental forces in the nonuse, use, or abuse of chemical substances. c. identify signs and/or symptoms of possible health risks at each level (experimental, social, daily use, etc.) of use and/or abuse of chemical substances. d. discuss regulatory laws controlling certain substances and the reasons for legal controls. e. identify personal strengths to enhance one's self-image.

Specific Proficiency Statements	Sample Indicators
	f. identify the need for taking prescribed medications properly. g. develop ways to cope with peer pressures and other influences.
Accident Prevention and Safety	
9. perceive the potential for hazards and accidents in any environment and the application of preventive and emergency measures.	a. discuss the relationship of attitudes and emotions to accidents. b. categorize hazards (natural and manmade) on the basis of incidence, consequences, and how risks may be reduced. c. analyze the influences of personal desires and social pressures on participation in risk-taking behavior. d. identify personal safety risks, precautionary measures, and appropriate intervention resources for handling abuse, violence, etc. e. demonstrate first aid and lifesaving techniques.
Health Promotion/Disease Prevention	
10. understand the causal factors of diseases and disorders and the extent to which certain diseases and disorders can be prevented, treated, and controlled through individual health behaviors.	a. identify the mental, emotional, and social factors which encourage disease prevention. b. explain the temporary or long-term effects of diseases. c. describe the disease process and reasons why disease develops. d. explain the body's immune response system. e. explain the role of research and its contributions to disease control. f. discuss that sexual intimacy is one way in which disease organisms are transmitted. g. assess personal health risks and design a personal health maintenance plan.

HEALTH EDUCATION
HIGH SCHOOL LEVEL

Proficiency List 074100

Specific Proficiency Statements	Sample Indicators
Through learning opportunities provided in **health education** at the high school level, students should	Students will
Growth and Development	
1. understand that growth and development is multidimensional, influences and is influenced by structure and function, follows a predictable sequence, and yet is individually unique.	a. use knowledge of the body's systems in its care in everyday living. b. explain the relationship among physical, mental, and social health in the process of growing and developing. c. demonstrate personal responsibility in promoting optimal growth and development. d. describe ways in which heredity and environment modify patterns and rate of physical, mental, and social growth and development.
Mental and Emotional Health	
2. assess and internalize the impact of emotions and stress on self-concept, behavior, and relationships with others.	a. explain how behavior and feelings affect one's concept of self and others. b. describe how values and feelings influence choices. c. identify ways to deal with stress. d. explain the importance of communication in relationships. e. demonstrate the acceptance of responsibility for personal behavior. f. explain why time for one's self is important.
Community Health/Environmental Health	
3. understand that health promotion/disease prevention is an individual, community, national, and international concern and responsibility.	a. explain how community health programs change in response to need. b. determine that comprehensive health programs require effective programming, accessibility to services, and quality personnel.

Specific Proficiency Statements	Sample Indicators
	c. conclude that the solution to health care problems requires cooperative effort on the part of individuals, families, and other groups within the community. d. evaluate personal career opportunities.
Nutrition	
4. determine how nutritional intake and eating patterns affect and are affected by physical, social, mental, and international concern and responsibility.	a. analyze influences that affect an individual's eating pattens. b. assess the factors involved in weight management. c. distinguish between fad diets and diets based on scientific principles of nutrition. d. describe how nutritional needs and status are affected by factors such as age, gender, physical activity, pregnancy, substance use, and disease. e. describe causes and effects of eating disorders.
Family Life	
5. understand how an individual's relationships influence and are influenced by the family which has evolved as a result of the interaction of social, economic, and cultural factors.	a. describe the significance of the family in the formation of values, standards, and attitudes. b. demonstrate knowledge of concepts and correct terminology related to sexuality. c. explain conception, prenatal stages of development, and the birth process and examine responsibilities to family planning. d. analyze characteristics that contribute to successful marriages as well as problems contributing to the disruption of harmonious family life. e. evaluate parenting skills and personal parenting style preferences. f. demonstrate knowledge of needs of children.
Consumer Health	
6. develop the ability to compare and contrast the factors that influence the individual's responsible selection, utilization, and evaluation of health information, products, and services.	a. analyze how emotions and values influence selection and use of health information, products, and services. b. interpret health data presented in visual and/or verbal form. c. demonstrate informed decision-making skills in the selection and use of health information, products, and services.

Specific Proficiency Statements	Sample Indicators
	d. describe functions of governmental agencies and regulations that monitor the production, promotion, and distribution of health information, products, and services.
Personal Health	
7. evaluate and integrate the complexity of forces which influence personal health principles and behavior in decision-making for the attainment of high level wellness throughout the life cycle.	a. explain how social forces affect personal health behaviors. b. develop examples of how emotional problems of adolescence affect and are affected by personal health care choices. c. describe how self-motivation is necessary if personal wellness is to be maintained. d. compare group "fad" behaviors with sound, healthy practices. e. design a plan for maintaining sound personal health. f. explain how the aging process is a part of the life cycle and is influenced by personal health practices. g. identify that death is a part of the life cycle.
Chemical Substance Use and Abuse	
8. recognize that the use of chemical substances arises from a variety of motivations, and the effects have an impact on the health of the individual, the family, and the community.	a. evaluate the personal health risks of the use, misuse, and abuse of chemical substances. b. differentiate among controls on purchases, possession, and use of chemical substances. c. compare detrimental effects of tobacco products including the effects on nonusers. d. analyze the effects of peer pressure and techniques of refusal skills. e. discuss the decision-making process as it relates to chemical use and abuse.
Accident Prevention and Safety	
9. perceive the potential for hazards and accidents in any environment and the application of preventive and emergency measures.	a. interpret effects of accidents on society. b. analyze how accidents are caused by human error and can be prevented. c. assess environmental factors which present safety risks.

Specific Proficiency Statements	Sample Indicators
	d. evaluate the effectiveness of organizations and groups in modifying and controlling environmental hazards. e. demonstrate accepted procedures in accident prevention, emergency care, and life-saving techniques. f. evaluate personal safety risks, precautionary measures, and intervention resources (abuse, violence).
Health Promotion/Disease Prevention	
10. understand the causal factors of diseases and disorders and the extent to which certain diseases and disorders can be prevented, treated, and controlled through individual health behaviors.	a. discuss the role of individuals and organizations in health promotion and disease prevention. b. demonstrate how disease prevention and control is the result of the interaction of environmental changes. c. classify sexually transmitted diseases including their prevention and treatment. d. integrate information about health promotion and disease prevention into an effective plan for lifetime health maintenance.

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PRACTICAL ARTS/INDUSTRIAL TECHNOLOGY EDUCATION

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INTRODUCTION

The Physical Education Proficiency Guide is designed to provide a framework for building a K-12 curriculum in physical education at the local school corporation level. The guide reflects current research about content and instruction in physical education. The emphasis is on using physical education to help students develop the skills and attitudes necessary for living a healthy, active life.

The Physical Education Proficiency Guide is not intended to take the place of locally developed curriculum plans for physical education. However, because the proficiency statements for physical education are based on a solid foundation of research, it is recommended that they be carefully studied by local curriculum development teams.

ACKNOWLEDGEMENTS

The Physical Education Proficiency Guide has been completed because of the contributions of several committees and many individuals. Members of the Ad Hoc Writing Committee deserve special thanks for their efforts in developing the proficiencies. These educators brought great talent and expertise to the task and gave freely of their time. Members of the committee are:

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STATEMENT OF PHILOSOPHY

Physical education provides scientifically based opportunities to develop skills, knowledge, and attitudes for all students through fundamental movements, rhythmic, sport, and fitness activities. The overall aim is to help students develop lifelong skills that include regular vigorous exercise and sports. The key is to assist people in assuming responsibility for their own health and well-being through an active life style.

A comprehensive physical education program should progress from introductory movement skills in the primary grades to advanced skills and in-depth study in high school. Programs should be designed to assist students to achieve their genetic physical potential. This can be accomplished only through a well-designed and effectively implemented program. A daily program of structured physical education experiences for all students in kindergarten through grade 12 is an important and integral part of the educational curriculum.

DEFINITION OF TERMS

Activities: All physical movements ranging from simple movements such as running and skipping to more complex activities such as individual and team sports.

Aerobics: A variety of vigorous exercise activities that stimulate the heart, blood vessels, and lungs over a period of time. This term has been popularized to mean "rhythmic exercise to music" for the purpose of physical fitness development.

Agility: The ability to move and change body positions quickly in a coordinated and efficient manner.

Biomechanical Principles: Mechanical principles following Newton's Laws applied to the human body.

Body Composition: The relative amounts of fat and lean body tissue or fat-free mass (muscle, bone, water) that comprise the body.

Cardiorespiratory: Relating to the heart, blood vessels, and lungs.

Cardiorespiratory Endurance: The capacity of one's heart, blood vessels, and lungs to function efficiently during vigorous, sustained activity such as running, cycling, and swimming. Also defined as the ability to continue or persist in strenuous tasks involving large muscle groups for extended periods of time.

Cardiovascular: Relating to the heart and the blood vessels or the circulation.

Complex Movement Skills: Fundamental movement patterns performed with increased accuracy, precision, and control.

Dynamic Balance: The ability to maintain equilibrium when moving from point to point.

Flexibility: The functional capacity of the joints to move through a full range of movement.

Fundamental Movement Patterns: The observable performance of basic locomotor, manipulative, and stabilizing movements. These involve the combination of movement patterns of two or more body segments.

Isometrics: A muscle contraction with the muscle generating force that does not allow significant shortening of the muscle (e.g., pushing against a wall).

DEFINITION OF TERMS (cont.)

Isotonics: A muscle contraction with the muscle generating force against a constant resistance with a shortening of the muscle (e.g., curling a barbell).

Locomotor Skills: Any skill that moves the body from one base of support to another. These include walk, run, hop, skip, jump, gallop, slide, and leap.

Low Organized Games: Simple games requiring few rules.

Manipulative Skills: The ability to handle objects with the hands, feet, or other body parts.

Mime: Using the body to communicate through the use of gesture and movement rather than through words.

Movement Exploration: Allowing skill development through guided discovery activities.

Muscular Endurance: The ability of a muscle to exert a force repeatedly or to hold a fixed or static contraction over a period of time.

Muscular Strength: The capacity of a muscle to exert a force against a resistance.

Nonlocomotor Skills: Orientation movements of the trunk or limb while in a stationary position. These include swing, sway, bend, stretch, and twist.

Physical Activity: Bodily movement produced by skeletal muscle that results in increased energy expenditure.

Physical Fitness: The ability of the heart, blood vessels, lungs, and muscles to function at an optimal level within one's inherited potential.

Skills: Physical skills related to such traits as agility, balance, coordination, speed, power, and reaction time.

Space: The concept of space deals with where the body moves.
Self-space/general space: the relative location of one's body.

Stability: The ability to maintain one's balance and the relationship to the force of gravity. This includes static and dynamic balancing.

Standardized Test: Testing batteries that have been developed through reliability and validity standards.

SUGGESTED SKILLS AND ACTIVITIES

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1. Locomotor Skills

- walk
- jump
- gallop
- combined locomotor skills
- run
- skip
- slide
- hop
- leap

2. Nonlocomotor Skills

- swing
- stretch
- sway
- twist
- bend

3. Manipulative Skills

- roll
- kick
- catch
- strike
- throw
- jump rope

4. Stability Skills

- static balance
- dodging
- dynamic balance
- starting/stopping

5. Rhythmic Activities

- singing/story games
- lummi sticks
- tinikling
- folk dance
- modern dance
- aerobics
- clogging/tap dance
- simple dances
- square dances
- ballroom dance
- modern jazz

6. Exploratory Activities

- wands
- hoops
- parachute activities
- mime

SELECTED SKILLS AND ACTIVITIES (cont.)

7. Fitness and Conditioning Activities

- weight training
- isometric/isotonic exercises
- endurance walk/run

8. Games and Sport Activities

- low organized games and relays
- lead-up games
- individual sports
  - gymnastics
  - track and field
  - aquatic activities
  - archery
- dual sports
  - racquet sports
  - wrestling
  - martial arts
- team sports
  - basketball
  - volleyball
  - softball
  - soccer/speedball
  - flag football
  - field hockey
- leisure and lifetime activities
  - bowling
  - swimming
  - golf
  - table tennis
  - skating
  - shuffleboard
  - walking/jogging
  - horseshoes

CURRICULUM PLANNING

A curriculum development model outlining the steps involved in the process of development, review, and revision of curriculum is provided in the Indiana Curriculum Proficiency Guide. Curriculum designers may find the model helpful as they pursue curriculum development work in the area of physical education.

Establish a Vision

A philosophy (or vision) of physical education that is consistent with the general education goals of the school corporation should be developed by the local curriculum planning team. When the philosophy is established, the team can assess the needs of the current physical education program and set goals that reflect the philosophy.

Assessing Needs

A survey of teachers, students, and recent graduates can give data that will help evaluate the present program. The following questions should be asked:

a) How well does the present program meet the needs of students?
b) What are some areas of strength and weakness?
c) Is the program consistent with recommendations of professional organizations and with recent research on teaching/learning strategies?

After the areas of need have been identified, ways to deal effectively with those needs can be established. These areas may involve content, or they may reflect organizational or instructional problems.

Setting Goals

A set of goals and objectives for physical education should be established and approved. An understanding of these goals and objectives by all members of the curriculum planning committee will give direction to the classroom teacher. In developing the goals and objectives for the physical education program, the committee should consult the state physical education proficiency statements, the recommendations of professional organizations, and the recent research in the field.

Implementation and Evaluation

Once the goals for the physical education program have been established, the implementation process begins. All involved in presenting appropriate learning experiences to students should have input regarding time lines, instructional methods, and materials (and equipment) to be used. The program should be continually evaluated to ensure that the needs of all students are being met.

General Suggestions

- Involve as many persons as possible in the process.
- Maintain K-12 continuity by encouraging overlapping committees or by holding joint meetings.
- Be aware of the recommendations of governmental health agencies and professional organizations, such as the American School Health Association and the American Alliance for Health, Physical Education, Recreation, and Dance.

THE PROFICIENCY STATEMENTS

In 1984 the Indiana Department of Education was directed by the State Board of Education to develop proficiency guides. The Board's directive stated: "A guide to aid schools in establishing proficiencies for each area (course) shall be prepared and distributed to the schools by the State Department of Education [511 IAC 6-2-2, 3, 4, & 5]." The Indiana Curriculum Proficiency Guide was developed in response to that directive. The guide has been completed because of the work of many educators from around the state of Indiana. These educators, representing every level of education, worked in cooperation with the Indiana Department of Education curriculum consultants who coordinated their efforts.

The proficiency statements are intended to serve as bench marks for state level decision making and local curriculum development. They have been designed to allow as much flexibility as possible to local school personnel in developing their own curriculum documents. They should not be considered statements of minimum competencies.

The term **proficiency,** as it is used in the guide, describes the educational growth that learners are expected to achieve as they progress through school. The proficiency statements contained in the Indiana Curriculum Proficiency Guide provide a general framework of the learning outcomes which students should be given opportunities to acquire. Each statement is specific to a given subject area and/or developmental level and will assist local curriculum and instructional planners as they develop and revise educational programs.

The proficiency statements break down into three levels of specificity:

A. FOUNDATION PROFICIENCY STATEMENTS

These statements set forth, in general terms, those learning experiences which are to be provided in each curriculum area during a student's K-12 years of schooling.

B. SPECIFIC PROFICIENCY STATEMENTS

These statements are listed for each curriculum area. They identify the skills, knowledge, and attitudes that students should have opportunities to acquire at given steps within the K-12 years of schooling.

C. PROFICIENCY INDICATORS

The indicators provide **examples** of behaviors which indicate that a specific proficiency has been acquired. The lists provided for the specific proficiency statements suggest only sample indicators; they are not all-inclusive. The indicators should be modified and supplemented as dictated by curriculum needs at the local level.

This guide is a dynamic document, designed to be easily changed to reflect the most recent and best thought and research concerning students' learning needs in physical education. It will be updated and revised as warranted. We welcome your suggestions and recommendations for improving the guide.

CODING SYSTEM

A coding system is used to identify sets of proficiency statements.

A six-digit code is utilized as follows:

1st & 2nd Digit:	Subject Area - based on the number in the course listing in the Administrative Rules of the Indiana State Board of Education, e.g., 02 = English Language Arts; 10 = Practical Arts/Industrial Technology Education.
3rd Digit:	"Developmental" Level - K/Primary = 1, Upper Elementary = 2, Middle/Junior High School = 3, and Senior High School = 4.
4th Digit:	Subject Sub-Area - e.g., U.S. History, Band, Reading/Literature, etc.
5th & 6th Digit:	Grade or Course Level - Specific grade level, if designated, or course level, such as Spanish II.

The following coding system is used for the **physical education** proficiencies:

Foundation Proficiency Statements	070200
Specific Proficiency Statements	
Kindergarten/Primary	071200
Upper Elementary	072200
Middle/Junior High School	073200
High School	074200

The specific proficiency statements and sample indicators are identified through the use of numbers and letters. These numbers and letters are for organizational and identification purposes only. They do not necessarily indicate a priority or chronological order for the statements.

FOUNDATION PROFICIENCY STATEMENTS - PHYSICAL EDUCATION

List 070200

Students in Indiana will be provided learning experiences in **physical education** which allow them to:

1. demonstrate progressive competence in skills necessary for the development of complex movement patterns leading to participation in and appreciation of sport and rhythmic activities.

2. demonstrate the effects and benefits of fitness activities on the development of the structure and function of the human body which will contribute to lifetime physical fitness and wellness.

3. demonstrate cognitive learning measured by written tests, projects, and/or documented teacher observations.

4. develop attitudes that lead to positive self-concept, cooperative interaction, and lifetime sport and fitness skills.

PHYSICAL EDUCATION
KINDERGARTEN/PRIMARY LEVEL

Proficiency List 071200

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **physical education** at kindergarten through grade three, students should	Students will
1. demonstrate the ability to perform locomotor and non-locomotor skills.	a. develop the proper skills for walking, running, hopping, jumping, skipping, leaping, galloping, and sliding. (Kindergarten) b. be able to walk, run, hop, jump, skip, leap, gallop, and slide with a variation in speed, direction, force, level, and in areas of general and personal space. c. be able to swing, sway, bend, stretch, and twist with a variation in speed, direction, force, level, and in areas of space.
2. demonstrate the ability to perform self-testing and stability skills.	a. perform simple stunts such as stork stand, thread the needle, back-to-back partner sit, crab walk. b. perform basic tumbling skills such as log roll, forward and backward roll, tip-up. c. perform weight transference skills such as rocking, rolling, flight, and step-like actions.
3. demonstrate the ability to perform basic rhythmic skills.	a. clap to different rhythmic patterns. (Kindergarten) b. execute locomotor and nonlocomotor movements to musical accompaniment. c. demonstrate creativity through movement exploration. d. perform singing games and simple dances.
4. demonstrate the ability to manipulate objects.	a. experience how to roll, catch, bounce, throw, and kick a ball. (Kindergarten) b. experience how to jump rope. (Kindergarten) c. roll, catch, bounce, throw, kick, and strike an object. d. throw and kick objects at stationary and moving targets. e. jump rope. f. collect, propel, and carry objects.

Specific Proficiency Statements	Sample Indicators
5. demonstrate the safe and appropriate use and care of equipment.	a. use equipment safely. b. take proper care of equipment.
6. understand the effects of physical activity on the body.	a. participate in activities involving the components of physical fitness such as strength, flexibility, cardiorespiratory endurance, and muscular endurance.
7. understand rules and strategies for simple games and activities.	a. demonstrate, through participation, a knowledge of the rules of simple games. b. demonstrate, through participation, simple play strategies.
8. integrate and reinforce a variety of educational concepts through games, rhythmic, and fitness activities.	a. respond through movement activities related to concepts from other disciplines such as mathematics, music, and social studies. b. create and demonstrate movement sequences which will include both locomotor and nonlocomotor skills.
9. exhibit individual, partner, small, and large group socialization skills.	a. follow directions. b. play cooperatively with other students. c. participate in discovery and problem-solving activities. d. participate in active and passive leisure time activities such as games of low organization and mime.
10. demonstrate positive attitudes toward self and others through physical experiences.	a. work cooperatively toward a common goal. b. comprehend and accept the concepts of winning and losing. c. exhibit sportsmanship in group activities. d. demonstrate self-acceptance.

PHYSICAL EDUCATION
UPPER ELEMENTARY LEVEL

Proficiency List 072200

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **physical education** at the upper elementary level, students should	Students will
1. demonstrate the ability to perform locomotor and non-locomotor movements in more complex skills.	a. walk with coordination and precision using correct posture. b. run a specified distance in a reasonable amount of time. c. perform a standing long jump, running long jump, and vertical jump. d. perform the combination of the hop, skip, and jump. e. slide forward, backward, and to either side. f. design and maneuver through obstacle courses utilizing various locomotor skills. g. perform stunts that require flexibility, strength, agility, and balance. h. play running and tag-type games skillfully and show agility in changing directions. i. perform combinations of locomotor and nonlocomotor movements. j. perform tumbling skills such as headstands, handstands, and cartwheels.
2. demonstrate the ability to perform rhythmic skills alone and with a partner.	a. swing, sway, bend, stretch, turn, and twist in creative patterns to music. b. communicate an idea or feeling through body movement to rhythm patterns. c. combine locomotor and nonlocomotor movements utilizing even and uneven rhythms. d. perform fundamental movements to singing games and simple dances. e. identify and perform traditional folk dances involving walking, running, step-hop, schottesche, waltz, two-step, polka, and mazurka.

Specific Proficiency Statements	Sample Indicators
3. **demonstrate the ability to manipulate objects with the skill necessary to participate in games and lead-up sports.**	a. throw and catch objects of varying sizes and shapes. b. dribble a ball with control. c. strike a ball. d. block or trap a ball. e. volley a ball. f. combine manipulative skills to play simple games.
4. **demonstrate respect, safe use, and care of equipment.**	a. use equipment appropriately. b. set up, take down, and store equipment properly.
5. **perform at a reasonable level in all components of physical/health-related fitness.**	a. identify the effects of physical activity involving flexibility, strength, muscular endurance, and cardiorespiratory endurance on the human body. b. perform vigorous movements through a variety of fitness activities. c. achieve at, or above, a reasonable level on each component of an acceptable physical/health-related fitness test. d. maintain an appropriate level of body composition.
6. **use knowledge and skills to communicate ideas and concepts through physical activities.**	a. demonstrate creative sequences of activities or movements to communicate an idea or theme. b. demonstrate knowledge and understanding of the rules necessary for safe participation in physical activities. c. explain and/or demonstrate the principles of conditioning and their relationship to personal fitness and well-being.
7. **exhibit knowledge of rules and strategies for games and lead-up sports.**	a. demonstrate knowledge of rules for selected games and lead-up sports that are necessary to be a contributing member of a team. b. demonstrate ability to use offensive and defensive strategies in lead-up sports such as kickball, newcomb, and fieldball.

Specific Proficiency Statements	Sample Indicators
8. exhibit positive self-concept and socialization skills through participation as contributing members of a group in team activities.	a. participate to one's potential in group activities. b. exhibit sportsmanship in group activities. c. perform individually, as partners, and as members of a group. d. develop self-confidence through performance in physical activities. e. develop an awareness of the effects of positive reinforcement.

PHYSICAL EDUCATION
MIDDLE/JUNIOR HIGH SCHOOL LEVEL

Proficiency List 073200

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **physical education** at the middle/junior high school level, students should	Students will
1. **demonstrate the ability to develop, combine, and refine fundamental techniques in rhythmic and sport activities.**	a. use fundamental motor skills in individual and sport activities such as badminton, gymnastics, tennis, track and field, and swimming. b. use fundamental motor skills in team sport activities such as basketball, soccer, softball, and volleyball. c. use fundamental rhythmic skills in dance activities such as square dance, folk dance, modern dance, ballroom dance, and aerobic dance.
2. **demonstrate respect, safe use, and care of equipment and facilities.**	a. use equipment appropriately. b. set up, take down, and store equipment properly. c. demonstrate respect for equipment and facilities. d. demonstrate an awareness of criteria for selection and purchase of equipment.
3. **exhibit knowledge and understanding of changes which occur in the function and structure of the body as a result of physical activity.**	a. demonstrate the ability to perform fitness activities on a regular basis with progression in intensity and/or duration. b. plan and implement a personal fitness program based upon the results of a pretest and evaluated by a posttest. c. achieve at, or above, a reasonable level on each component of an acceptable physical/health-related fitness test.
4. **know the biomechanical principles necessary for safe and skilled physical performance.**	a. demonstrate the relationship of biomechanical principles of force, motion, and stability for safe physical performance. b. demonstrate the relationship of biomechanical principles of force, motion, and stability for increased efficiency in activities such as shot put, swimming, tumbling, and racquet sports.

Specific Proficiency Statements	Sample Indicators
5. understand the effects of physical activity on the development, structure, and functions of the human body.	a. recognize basic principles of exercise physiology and conditioning and their relationship to personal physical fitness. b. demonstrate ability to measure heart rate, blood pressure, percent of body fat, muscle strength, and flexibility.
6. through written evaluation, apply rules and techniques learned in organized sport activities.	a. analyze skill techniques for sports such as basketball, volleyball, soccer, softball, tennis, and swimming. b. interpret and apply rules for sports such as basketball, volleyball, soccer, softball, tennis, and swimming.
7. develop an appreciation of other cultures through participation in dance.	a. analyze basic dance steps and folk dances. b. illustrate an understanding of the historical background of selected dances.
8. demonstrate positive attitudes and behaviors toward fitness and sports.	a. display sportsmanship in all situations. b. show appropriate behavior as a participant or as a spectator through positive reinforcement techniques. c. assume responsibility for one's physical health and well-being.
9. develop the ability to lead and follow by participating in individual and group performances.	a. perform alone or with a group/team in front of others. b. accept responsibilities as class leaders. c. demonstrate appropriate behavior as spectators or nonparticipants.

PHYSICAL EDUCATION
HIGH SCHOOL LEVEL

Proficiency List 074200

Specific Proficiency Statements	**Sample Indicators**
Through learning opportunities provided in **physical education** at the high school level, students should	Students will
1. synthesize previously learned skills into sport strategies.	a. use advanced motor skills in individual and dual sport activities such as badminton, tennis, track and field, and swimming. b. use advanced motor skills in team sport activities such as basketball, soccer, softball, and volleyball.
2. demonstrate the ability to perform and appreciate sport and activity-specific skills.	a. analyze, evaluate, and integrate sport and activity specific skills for successful performance. b. evaluate performance in physical activities through personal goal setting.
3. exhibit the ability to synthesize and perform creative rhythmic movement patterns with increasing degrees of difficulty.	a. demonstrate advanced rhythmic skills in selected dance activities such as modern jazz, modern dance, ballroom dance, tap dance, folk and square dance. b. choreograph and perform movement sequences and/or dances. c. demonstrate advanced hand-eye-foot coordination in athletic activities such as racquet sports, field sports, and court sports.
4. exhibit knowledge of the care and appropriate use of equipment and facilities.	a. demonstrate knowledge of criteria for appropriate selection of equipment. b. demonstrate ability to safely set up, store, and care for equipment. c. demonstrate ability to safely use equipment and facilities. d. demonstrate respect for equipment and facilities.

Specific Proficiency Statements	Sample Indicators
5. identify and evaluate personal physiological responses to exercise.	a. monitor body responses before, during, and following exercise by checking such factors as heart rate, perceived exertion, and recovery time. b. keep a weekly log monitoring personal fitness.
6. maintain an optimal level of personal fitness.	a. perform fitness activities through weight training and aerobics such as walking, running, cycling, and swimming. b. maintain an acceptable level of body composition.
7. exhibit awareness of career opportunities related to physical education and sport education.	a. recognize career opportunities such as teacher, coach, sports manager, fitness instructor, athletic trainer, physical therapist, professional athlete, and official. b. identify professional organizations, activities, literature, and resources relating to careers in physical education and sport.
8. evaluate criteria for the selection of physical fitness and sports products and services.	a. demonstrate knowledge of consumer awareness in selection of sport products considering factors such as quality, construction, and price. b. evaluate sport and fitness services such as weight training and strength building programs, fitness programs from books/ magazines, health centers, and spas.
9. analyze, evaluate, and integrate information about complex motor activities that lead to successful physical performance.	a. exhibit knowledge of advanced strategies in team sports such as basketball and volleyball. b. exhibit knowledge of advanced strategies in leisure sport activities such as tennis, bowling, and swimming. c. exhibit understanding of psychological and motivational principles as applied to sport activities.

Specific Proficiency Statements	Sample Indicators
10. through written evaluation, demonstrate knowledge and understanding of basic principles of physiology of exercise, nutrition, and chemical substances and their effects on the physical performance of the human body.	a. explain the principles of exercise. b. explain the effects of chemical substances on physical performance and functions of the body. c. cite the effects of vigorous physical activity on the function of the body. d. describe the effects of nutrition on performance. e. use and understand a fitness vocabulary.
11. understand benefits of physical education on physical and emotional well-being.	a. demonstrate self-control in competitive physical situations. b. attempt new activities, accept criticism, and appreciate accomplishments of self and others. c. demonstrate ability to control oneself under stressful conditions in sport activities both as a participant and as a spectator.
12. apply communication and social skills learned through physical activities to daily life experiences.	a. demonstrate a variety of skills necessary to participate in lifelong physical activities. b. apply the values of sportsmanship, self-discipline, personal achievement, and the importance of others in daily living. c. demonstrate the use of positive and supportive reinforcement techniques, such as compliments, praise, and encouragement.

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